



Biodiversity
Report 2025

OUR COMMITMENT TO BIODIVERSITY



INTRODUCTION

At Corporación Aceros Arequipa (CAASA), we understand that biodiversity is the foundation upon which ecosystems, communities, and economic activities depend. In line with our Environmental Policy approved by the Board of Directors, we maintain a firm commitment to biodiversity conservation across all our sites, integrating it into our sustainability strategy.

Our operations in Pisco comprise the steel complex (220 ha) and the San Juan de Buenavista property (102.2 ha), designated for the storage of industrial and recyclable materials. The steel complex is located outside the buffer zone of the Paracas National Reserve (PNR), 2.16 km from its boundaries and outside critical biodiversity areas. Although the San Juan de Buenavista property is located within the buffer zone, it lies in an area where activities compatible with the conservation of the protected natural area are permitted. Under no circumstances are our

operations conducted within the Reserve itself or within critical biodiversity areas.

Both facilities have environmental management instruments approved by the Ministry of Production (PRODUCE), with a favorable opinion from SERNANP, whose assessments of impacts on the biological environment concluded that the level of impact is “not significant.”

This report presents CAASA’s biodiversity-related progress during 2025, structured under our Integrated Risk and Opportunity Management Methodology (GIRO), aligned with the LEAP approach of the TNFD framework. Through this approach, we identify, assess, control, and monitor biodiversity-related impact and dependency risks associated with our steelmaking activities, while implementing concrete actions to protect and enhance biodiversity within our operating environment.

WE MAINTAIN A
FIRM COMMITMENT
TO BIODIVERSITY
CONSERVATION
ACROSS ALL OUR SITES,
INTEGRATING IT INTO
OUR SUSTAINABILITY
STRATEGY.





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ENVIRONMENT





1.1. TRENDS

At CAASA, we continuously monitor trends and analyze biodiversity-related risks. Given that our operations generate an impact classified as “not significant” on the biological environment and are conducted outside critical biodiversity areas, this risk is not among the most critical for the Company. Nevertheless, we recognize its strategic relevance and maintain an active and systematic approach to its management



GLOBAL RISK

Biodiversity Loss and Ecosystem Collapse

The World Economic Forum projects that, within the next ten years, biodiversity loss and ecosystem collapse will rank as the second most severe global risk, reaffirming the strategic importance of proactively managing biodiversity-related risks ([see Annex 1](#)).



TRENDS



→ Global
Biodiversity
Finance

At COP16 of the Convention on Biological Diversity in 2025, a financing plan of USD 200 billion annually was approved to protect and restore 30% of global ecosystems by 2030 under the Kunming-Montreal Global Biodiversity Framework. For the industrial sector, this signals increasing regulation regarding access to raw materials in environmentally sensitive areas, as well as growing disclosure requirements from investors and customers.



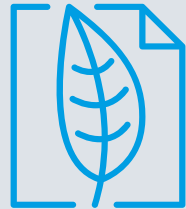
→ Nature as a Condition for
Market and Financial Access
(TNFD)

By the end of 2025, more than 733 organizations across 56 countries had committed to reporting in alignment with the TNFD (Taskforce on Nature-related Financial Disclosures) framework, representing a 46% increase in a single year. What began as a voluntary initiative is becoming a market expectation: investment managers, banks, and industrial customers increasingly require evidence of active nature-related management as a prerequisite for access to financing and contracts.



→ Global Economic
Dependence on
Ecosystem Services

According to the WEF, more than 50% of global GDP is moderately or highly dependent on nature. Unlike climate risk, nature-related risk is local, irreversible, and difficult to offset through technology. Its materialization affects not only extractive industries but also supply chains, input availability, and market access throughout the manufacturing sector.



→ Technology and
Real-Time Biodiversity
Monitoring

Satellite monitoring, environmental DNA, and artificial intelligence have transformed the way biodiversity is measured and verified. Tools such as IBAT and the WWF Biodiversity Risk Filter enable precise geospatial identification of any operational site's exposure to critical biodiversity. What was once difficult to verify can now be readily assessed by investors, regulators, and local communities.

1.2. PROTECTED NATURAL AREAS

Protected Natural Areas (PNAs) are terrestrial or marine territories legally recognized and protected by the State to conserve biodiversity and its cultural, scenic, and scientific value. According to the Protected Natural Areas Law (1997), PNAs constitute part of the Nation's heritage, and their preservation is a permanent responsibility of the State.

Protected Natural Areas are classified according to their administration, use, and zoning ([see Annex2](#) .

With respect to use, two categories are distinguished: Indirect-use areas, intended for scientific research, recreation, and tourism, where resource extraction is prohibited. Direct-use areas, which allow regulated use of resources by local populations in accordance with the corresponding management plan

Additionally, each PNA may include a buffer zone, defined as an adjacent area requiring special management to

ensure conservation of the protected area, as well as private conservation areas. All PNAs collectively form the National System of State-Protected Natural Areas (SINANPE), managed by the National Service of Natural Areas Protected by the State (SERNANP) in coordination with regional governments, municipalities, the private sector, and local communities.

Each Protected Natural Area is governed by a Master Plan, a planning instrument developed through participatory processes that defines zoning, management strategies, and policies for each area.





CLASSIFICATION OF PROTECTED NATURAL AREAS

ADMINISTRATION

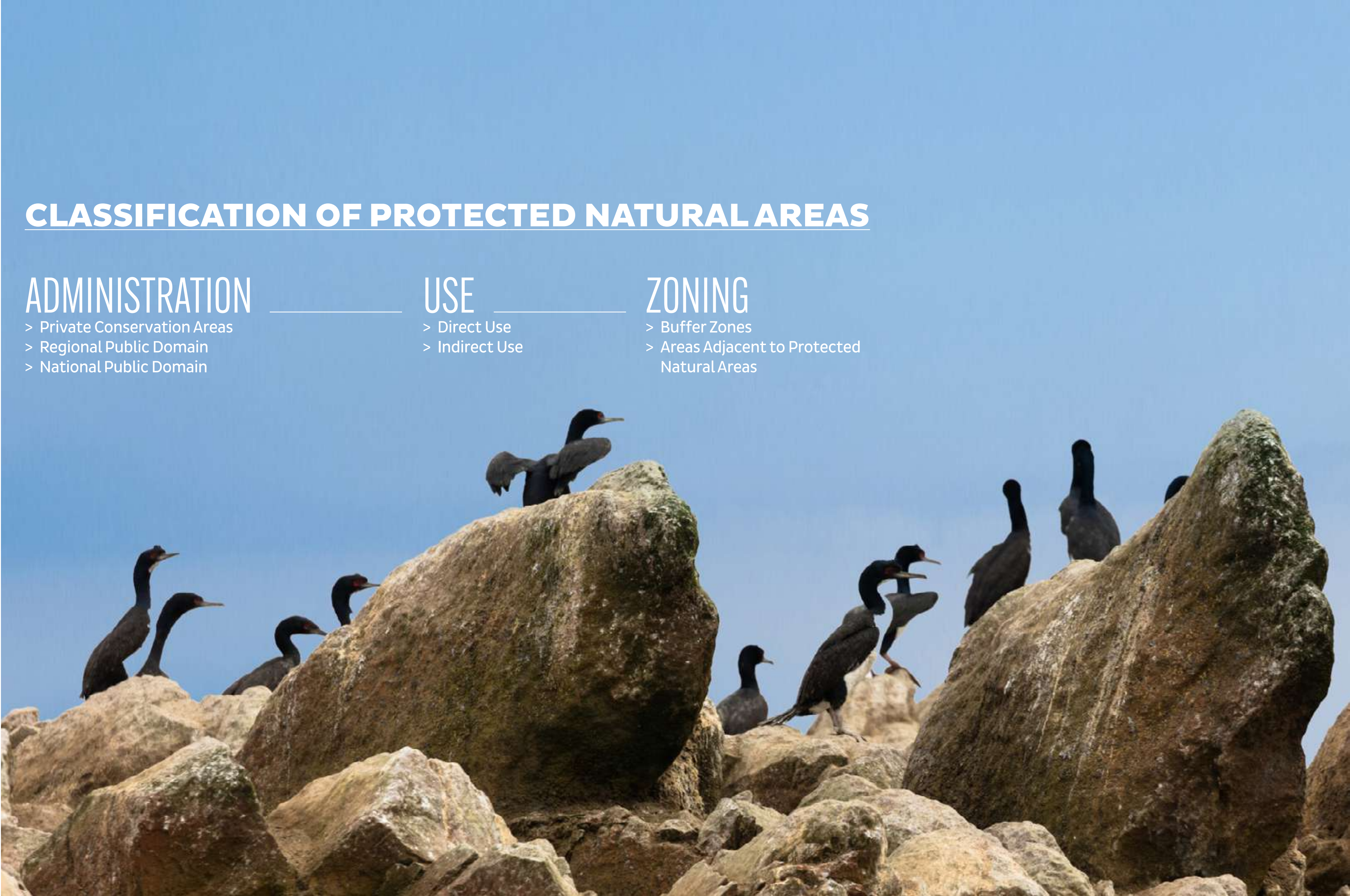
- > Private Conservation Areas
- > Regional Public Domain
- > National Public Domain

USE

- > Direct Use
- > Indirect Use

ZONING

- > Buffer Zones
- > Areas Adjacent to Protected Natural Areas





1.3. PARACAS NATIONAL RESERVE

The Paracas National Reserve (PNR) was established in 1975 to conserve the marine and desert ecosystems of Peru’s coastline and preserve the diversity of wildlife species that coexist there.

The Reserve covers an area of 335,000 hectares in the province of Pisco, Ica Region, and is managed by SERNANP.

PARACAS NATIONAL RESERVE ECOSYSTEMS

The PNR protects a representative sample of the marine ecosystems of the Peruvian (Humboldt) Current, recognized as one of the most productive marine systems on the planet. The Reserve also provides critical habitat for numerous resident and migratory bird species that use the area for feeding and shelter during their annual migrations. It is also home to a wide diversity of fish, mammals, reptiles, and mollusks.

The Reserve contains five ecosystem types: Wetlands, Islands, islets, headlands, and cliffs, Coastal desert, Marine ecosystem (0–50 m depth), Deep marine ecosystem (greater than 50 m depth) ([see Annex 3](#) ).





PARACAS NATIONAL RESERVE MASTER PLAN

At the end of 2025, SERNANP approved the new Paracas National Reserve Master Plan for the 2025–2030 period. This instrument was developed through a participatory process involving public and private institutions, fishing organizations, civil society, and local communities. It guides the integrated management of the Reserve under an ecosystem-based and participatory governance approach. The 2025–2030 Master Plan defines the Reserve’s zoning categories ([see Annex 4](#) ) and confirms that the buffer zone of the Paracas National Reserve is located outside CAASA’s core operations. The Plan establishes 6 strategic objectives.

THIS INSTRUMENT WAS DEVELOPED
THROUGH A PARTICIPATORY
PROCESS INVOLVING PUBLIC AND
PRIVATE INSTITUTIONS, FISHING
ORGANIZATIONS, CIVIL SOCIETY, AND
LOCAL COMMUNITIES.

Paracas National Reserve Master Plan Six Strategic Objectives for the 2025– 2030 Period

01 —————
Maintain marine-coastal ecosystems, wetlands, and the coastal desert in a favorable state of conservation.

02 —————
Conserve populations of priority species.

03 —————
Maintain the sustainable use of hydrobiological resources through artisanal fishing.

04 —————
Optimize tourism and recreational management under sustainability and carrying-capacity criteria.

05 —————
Strengthen the management of scientific knowledge on biodiversity to support decision-making.

06 —————
Strengthen governance through inclusive participation with intercultural, gender, and intergenerational approaches.





→ PNR ECOSYSTEMS

MARINE-COASTAL

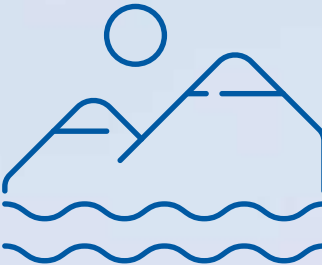


MARINE ECOSYSTEM (0-50 M
BELOW MEAN SEA LEVEL)



MARINE ECOSYSTEM
FROM 0 TO 50 M.A.S.L.

COASTAL DESERT



COASTAL DESERT



ISLANDS, ISLETS,
HEADLANDS, AND CLIFFS

WETLANDS



WETLANDS





1.4. BUFFER ZONE OF THE PARACAS NATIONAL RESERVE



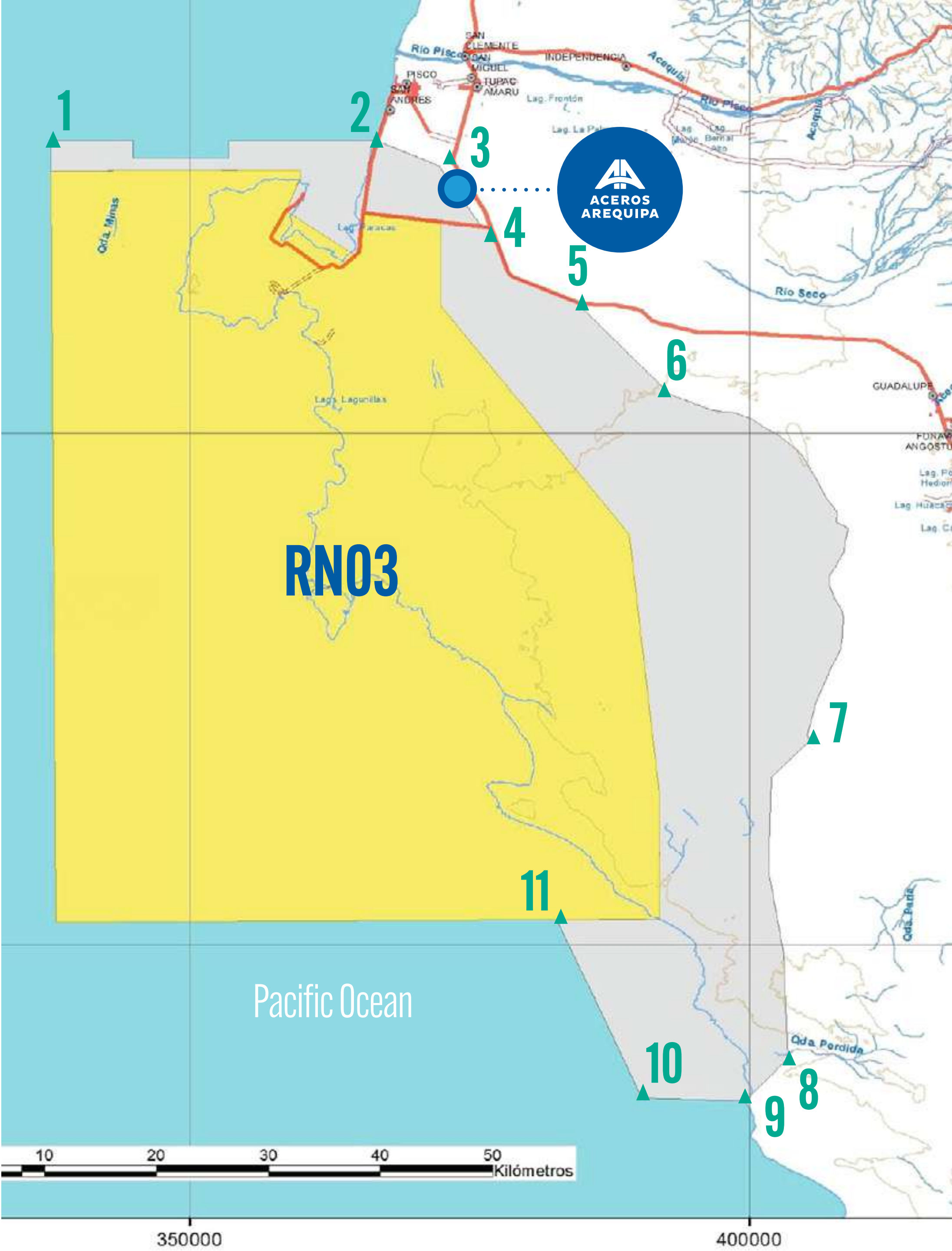
The buffer zone is the area adjacent to a protected natural area that requires special management to ensure its conservation. Activities carried out within this zone must not jeopardize the objectives of the protected area; therefore, uses compatible with conservation are promoted, such as ecotourism, scientific research, and ecological restoration.

The Paracas National Reserve (PNR) has a zoning scheme structured into seven zoning categories [\(see Annex 4 !\[\]\(173968034f6ca6c36e25dcb8a274badd_img.jpg\)](#)), each with specific conditions and land-use regulations. According to the PNR zoning map [\(see Annex 5 !\[\]\(02d28a4c4ca0666e31d02e309503bc63_img.jpg\)](#))

and the georeferenced points defining the buffer zone [\(see Annex 6 !\[\]\(43fda5baa5446493352974e4b4060607_img.jpg\)](#)), the core of CAASA’s steelmaking operations is located outside the buffer zone.

However, the San Juan de Buenavista property, adjacent to the Steel Complex and designated for the storage of industrial materials, is located within the buffer zone, between milestones 3 and 4. It is important to note that, under all circumstances, the Company’s activities maintain a safety distance of more than 2.16 km from the boundaries of the Reserve.

The Master Plan, the instrument that defines the zoning scheme and is updated every five years, was revised for the 2025–2030 period through Executive Presidency Resolution No. 000173-2025-SERNANP. This instrument fully ratifies the buffer zone established in 2016, without modifications to its geographical boundaries, confirming the stability of the territorial framework within which CAASA operates and the compatibility of its activities with the current planning framework for the Paracas region.



ALL COMPANY ACTIVITIES MAINTAIN A
SAFETY DISTANCE OF MORE THAN 2.16 KM
FROM THE BOUNDARIES OF THE RESERVE.

LEGEND

- CAASA Operations Area
- Protected Natural Area
- Buffer Zone
- Georeferenced Buffer Zone Points



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2.1. OUR ENVIRONMENTAL POLICY

Since 2020, Aceros Arequipa has had a Corporate Environmental Policy approved by the Board of Directors, which establishes the environmental management guidelines for the Company and its subsidiaries. This policy guides the prevention, control, and mitigation of negative environmental impacts across all production operations, logistics activities, and corporate facilities, including distribution and delivery services, while ensuring the sustainable use of natural resources and compliance with applicable regulations.

As part of this approach, environmental controls are incorporated into project design, and climate change mitigation and adaptation measures are implemented. The policy is structured around six environmental management pillars that continuously guide the Company’s objectives, strategies, and initiatives.

CORPORATE ENVIRONMENTAL POLICY
[View our policy](#)



ACEROS AREQUIPA HAS A CORPORATE ENVIRONMENTAL POLICY APPROVED BY THE BOARD OF DIRECTORS



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2.2. OUR COMMITMENT TO BIODIVERSITY

We are committed to fostering and strengthening an environmental culture that promotes the country's sustainable development and demonstrates that the steel industry and its related activities can operate in harmony with the environment. In line with our Corporate Environmental Policy, our biodiversity approach and commitment are structured around 10 strategic guidelines that guide our commitments and actions to minimize impacts on ecosystems and promote their protection and recovery. This commitment, approved by the Board of Directors, extends across CAASA's entire value chain. It applies to our own operations, employees and contractors, suppliers of goods and services, and business partners, licensees, and subcontracting partners, including due diligence, mergers, and acquisitions processes.





Strategic Biodiversity Guidelines

01.

Comply with local, regional, and national legal requirements related to land management and biodiversity protection; and refrain from operating in World Heritage Sites or protected areas classified under Categories I–IV of the International Union for Conservation of Nature (IUCN)⁽¹⁾.
02.

Develop management plans to promote the importance of biodiversity. Prioritize the conservation of key species, species with special conservation status, species that historically inhabited the area, and species with a history of traditional use and value to local communities.
03.

Assess biodiversity impacts within our current and future areas of operation, as required based on their location. Where areas of global or national biodiversity importance are identified, the mitigation hierarchy will be applied, focusing on avoid, reduce, restore, regenerate, and transform. For all current CAASA projects, measures will be implemented to minimize biodiversity impacts.
04.

Collaborate with stakeholders to ensure the long-term conservation of native species within the area of influence of our operations.
05.

Prevent deforestation resulting from CAASA's activities and, where necessary, offset any negative impacts through reforestation programs while maintaining our commitment to zero-deforestation operations.
06.

Identify and define action plans to achieve no net loss of biodiversity⁽²⁾ in important habitats located near our operations.
07.

Increase net positive impact through restoration and transformation.
08.

Work jointly with external public- and private-sector partners to fulfill our commitment to biodiversity conservation within our area of influence.
09.

Acquire, develop, and apply systems and technologies to reduce impacts on biodiversity.
10.

Promote the collection, analysis, and improvement of biodiversity information and knowledge in collaboration with experts.



(1) The IUCN Protected Area Management Categories system provides a common understanding and an international reference framework for protected areas, both among and within countries. The categories include: Category I (Strict Protection), Category II (Ecosystem Conservation and Protection), Category III (Natural Feature Conservation), Category IV (Conservation through Active Management), Category V (Landscape and Seascape Conservation and Recreation), and Category VI (Sustainable Use of Natural Resources).

(2) The principle of No Net Loss of Biodiversity or Net Gain of Biodiversity refers to offsets designed and implemented to achieve measurable in situ conservation outcomes that can reasonably be expected to result in no net loss of biodiversity.

CAASA established as its no-net-loss target, beginning in 2016, the expansion and maintenance of a 10.95 km perimeter greenbelt—including both the Steel Complex and the San Juan de Buenavista property—as habitat for local species and a resting area for migratory birds, with full achievement of this target projected by 2026.



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2.3. MITIGATION HIERARCHY

The mitigation hierarchy is the framework that guides CAASA's actions to minimize adverse impacts on biodiversity, prioritizing prevention over correction. It is structured around five progressive strategies, ranging from impact avoidance to systemic transformation, and serves as the foundation for our response plans addressing identified biodiversity risks.

All CAASA operations are conducted within zoning classifications that are compatible with their activities. The Steel Complex is the only facility located near a Protected Natural Area (PNA), and it is at this operation where the mitigation hierarchy described below is applied.

The specific actions implemented under each strategy are detailed in [Chapter 4](#)  of this report.



ALL CAASA OPERATIONS ARE CONDUCTED
WITHIN ZONING CLASSIFICATIONS THAT
ARE COMPATIBLE WITH THEIR ACTIVITIES.



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STRATEGY		DESCRIPTION	CAASA ACTIONS
Negative Net Impact	Avoid	Preventive measures aimed at preventing impacts or dependencies from occurring at their source, thereby achieving their complete elimination.	Through appropriate site selection, the operation is located outside the Paracas National Reserve (PNR), at an approximate distance of 2.16 km. As part of our proactive management approach, we maintain a zero-deforestation policy across our operations.
	Reduce	Measures aimed at minimizing and reducing impacts without completely eliminating them, promoting more sustainable and efficient production and consumption practices.	Through operational controls and mitigation measures, hunting is prohibited and training programs are implemented for suppliers and employees. Fixed emission sources are equipped with flue gas treatment systems that comply with and exceed current regulatory requirements. In addition, a domestic wastewater treatment system is in place, enabling its reuse in green areas.
	Regenerate	Measures intended to strengthen biophysical functions and increase the productivity of ecosystem processes and their components.	The Domestic Wastewater Treatment System (DWTS), together with the composting service, enables the reuse of biosolids and compost as organic amendments to improve soil quality in green areas. This improvement in soil conditions supports the establishment of multiple green areas within the Steel Complex.
Positive Net Impact	Restore	Measures aimed at initiating or accelerating ecosystem recovery, strengthening ecosystem health, integrity, and sustainability, with a focus on permanent changes in ecosystem condition.	As a result of the implementation of preventive measures, the application of this corrective measure has not been required. However, the establishment of the perimeter greenbelt constitutes an action to create permanent tree cover in an area that previously lacked vegetation, transforming a formerly barren area into an active habitat for local wildlife. Currently, the greenbelt extends for 10.1 km and is composed of eucalyptus trees with an average height of 10 meters, providing habitat for birds and reptiles.
	Transform	Measures aimed at driving systemic change, particularly to address the factors that drive nature loss through technological, economic, institutional, and social transformations, as well as changes in underlying values and behaviors.	The implementation of preventive measures has eliminated the need for corrective actions. However, complementary initiatives are being developed to strengthen biodiversity management, including the “Biodiversity Guide,” which identifies and disseminates knowledge about species associated with steelmaking activities, as well as environmental awareness programs directed at stakeholders within the area of influence. Additionally, the Company continues to promote the circular economy through industrial by-product marketplaces aimed at the reuse of alternative materials such as eco-aggregate, rolling mill scale, and zinc fume, among others, thereby encouraging circularity and research into new applications. View our Biodiversity Guide View our Environmental Awareness Program View our Industrial By-products Marketplace



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Biodiversity risk management is integrated into the corporate Integrated Risk and Opportunity Management (GIRO) system, aligned with the Corporate Internal Control and Integrated Risk Management Policy and the LEAP approach of the TNFD (Taskforce on Nature-related Financial Disclosures) framework (see Annex 7 ).

This approach ensures that nature-related dependencies and impacts are managed under the same standards, assessment criteria, and governance structures applied to other corporate risks, providing a unified and strategic view of our environmental resilience across all operations.





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3.1. INTEGRATED RISK AND OPPORTUNITY MANAGEMENT (GIRO) METHODOLOGY

The Integrated Risk and Opportunity Management (GIRO) Methodology establishes the reference framework for risk management at CAASA and its subsidiaries. It provides a common language and set of criteria across all operations, enabling us to anticipate unexpected events, protect business continuity, and strengthen value creation. It integrates both strategic and operational risks and ensures proactive monitoring of the environment to identify and mitigate threats before they affect the Company's strategy.

GIRO consists of four stages: Identify, Assess, Control, and Monitor risks. Each risk is evaluated based on its level of impact and likelihood in order to determine its

level of criticality, which is classified into four categories: Low, Moderate, Considerable, and High ([see Annex 8](#)).

The GIRO methodology is integrated into CAASA's Strategic Management Cycle and aligned with international standards and regulatory frameworks, consolidating risk management as an essential pillar of decision-making. This ensures coordinated and consistent management aligned with our purpose, mission, and values, linking each risk to specific activities and clearly assigned responsibilities at all levels.

[The Four Stages of GIRO→](#)





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INTEGRATION OF BIODIVERSITY RISK MANAGEMENT

GIRO METHODOLOGY



1. IDENTIFY →
Recognize events that could affect the achievement of process or organizational objectives.

2. ASSESS →
Analyze the likelihood and impact of risks to determine their level of criticality.

3. CONTROL →
Define and implement actions or controls to manage identified risks.

4. MONITOR →
Track risks and the effectiveness of controls to ensure their proper management.

BIODIVERSITY RISK MANAGEMENT



RISK IDENTIFICATION →
Determine the geographical location of the study area and review the biological baseline and applicable management instruments.

ANALYSIS AND ASSESSMENT →
Determine the criticality of each identified risk based on its level of impact and likelihood of occurrence.

RESPONSE PLAN →
Develop the response strategy for each risk according to its level of criticality and existing controls.

MONITORING AND FOLLOW-UP →
Continuously assess the effectiveness of implemented controls and response plans.



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RECOMMENDATIONS

LEAP MODEL



LOCATE →

Identify the geographical location of operations and the value chain to determine their interaction with specific ecosystems and areas of high biological sensitivity.

EVALUATE →

Analyze and quantify the dependencies and impacts that the organization's activities have on ecosystem services and natural capital.

ASSESS →

Estimate the risks and opportunities arising from the organization's relationship with nature in order to integrate them into the Company's strategic and financial decision-making.

PREPARE →

Develop the response plans, targets, and reporting metrics required to transparently communicate biodiversity performance in accordance with international standards.



THE INTEGRATED RISK AND OPPORTUNITY
MANAGEMENT (GIRO) METHODOLOGY ESTABLISHES
THE REFERENCE FRAMEWORK FOR RISK
MANAGEMENT AT CAASA AND ITS SUBSIDIARIES



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3.2. GIRO APPLIED TO BIODIVERSITY RISK MANAGEMENT

Biodiversity risk analysis follows the four phases of the GIRO methodology



IDENTIFY Risk Identification

At this stage, the study area is defined and the applicable environmental management instruments in force are reviewed.

Location and Instruments: Definition of the site or study area and the applicable environmental management instruments in force.

Risk Identification: Risks may be categorized as impact risks, referring to the positive or negative effects of operations on the state of nature—such as air, water, or soil pollution, or habitat alteration; and dependency risks, referring to the ecosystem services that the organization requires to operate, such as water regulation, pollination, or carbon sequestration.





ASSESS

Analysis and Assessment

The criticality of each identified risk is assessed based on its level of impact and likelihood of occurrence.

To assess **impact**, three methodologies recognized by the competent environmental authority are applied: Leopold, which assigns a relative value to the impact based on its magnitude and importance on environmental components; Conesa, which defines the significance

level of the impact at each stage of the project; and GIRO, which establishes risk criticality at four levels: low, moderate, considerable, and high.

For the **probability** level, the assessment considers estimated occurrence, exposure, and the historical frequency of the risk.



Impact

Magnitude of the negative consequences that a risk could generate if it were to materialize.



Probability

The likelihood that a risk will occur within a given period.

LEOPOLD METHODOLOGY →

Assesses the impact of each activity on environmental components by assigning a value according to its magnitude and importance. It produces a significance rating on a five-level scale, ranging from not significant to highly significant.

CONESA METHODOLOGY →

Determines the significance of each environmental impact at each stage of the project and classifies it as significant or not significant. It enables the identification of the stages within the production process where the greatest potential impact on the environment is concentrated.

GIRO METHODOLOGY →

CAASA's proprietary framework that combines the level of impact and the likelihood of occurrence to determine the criticality of each risk at four levels: low, moderate, considerable, and high.



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CONTROL

Response Plans

Following the risk assessment, its level of criticality is considered and a response strategy is formulated, taking into account the existing controls related to the risk, focused on conservation, collaboration, and research to preserve existing biodiversity.

MONITOR

Monitoring and Follow-up

This process is based on the potential recurrence of risks, analyzed through estimates of occurrence, exposure levels, historical frequency, and the impact and probability criteria defined in our GIRO methodology ([see Annex 8](#)).

This component is governed by the Corporate Internal Control and Integrated Risk Management Policy, ensuring that control mechanisms remain current and effective. Ongoing evaluations (ISO audits, legal compliance audits, controls, and environmental inspections) and independent evaluations (internal and external audits), or a combination of both, are used to determine whether each component of the internal control system and the controls established to comply with the principles of each component are present and functioning effectively.





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This monitoring system is structured through



ASSESSMENT

We conduct ongoing and independent assessments to validate the effectiveness of the internal control system. This includes a robust program of audits, quality controls, budget oversight, and specialized inspections.



COMMUNICATION

The results of assessments are reported in a timely manner to enable the immediate implementation of corrective actions and the strengthening of existing controls in response to identified deviations.



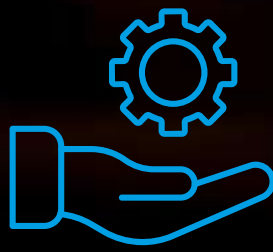
THREE LINES MODEL

Our defense structure is periodically reviewed through external audits and oversight by regulatory authorities, ensuring transparency and alignment with best corporate governance practices.

THREE LINES MODEL



First Line: Process owners responsible for maintaining an effective risk management system within their areas.



Second Line: Support functions responsible for providing methodology, management support, and monitoring the effectiveness of controls.



Third Line: Internal Audit, responsible for objective and independent oversight, reporting to the Board of Directors and the Audit and Risk Committee.



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BIODIVERSITY RISK MANAGEMENT

(GIRO METHODOLOGY PHASES)



IDENTIFY



ASSESS



CONTROL



MONITOR





IDENTIFY

Risk Identification

LOCATION

CAASA’s operations are located at Kilometer 241 of the South Pan-American Highway, in the district of Paracas, province of Pisco, Ica Region. These operations comprise the Steel Complex, covering 220 hectares, and the San Juan de Buenavista property, covering 102.2 hectares, where the Industrial and Reprocessable Materials Storage Yard Project is located, for a total operating area of 322.2 hectares [\(see Annex 9 📄\)](#).

According to the Zoning Map of the Paracas National Reserve Master Plan [\(see Annex 6 📄\)](#) the San Juan de Buenavista property is located within the buffer zone of the PNR, although it is not located within the Reserve itself nor in proximity to critical biodiversity areas. CAASA’s steelmaking activities are conducted more than 2.16 km from the boundaries of the PNR [\(see Annex 10 📄\)](#).

The areas of the Reserve closest to our operations are the Wild Zone, the Direct Use Zone, and the Recovery Zone, all of which are subject to special management conditions that ensure the conservation of the protected natural area.

INSTRUMENTS

Our operations in Pisco are governed by the highest compliance standards, supported by the following environmental management instruments currently in force and approved by the Ministry of Production (PRODUCE):

- > **Steel Complex:** Covered by the document “Update of the Environmental Management Plan of the Environmental Adaptation and Management Program (PAMA)”.
- > **Former San Juan de Buenavista Property:** Covered by the “Environmental Compliance Declaration (DAA)” for the storage yard of industrial materials and co-products.

It is important to highlight that the assessment conducted under both instruments concluded that their impact on the biological environment is “**not significant**.” This result confirms the effectiveness of our environmental prevention and control measures within the operational environment.

RISKS

In accordance with the GIRO methodology established in our Corporate Internal Control and Integrated Risk Management Policy, and aligned with the LEAP approach of the TNFD framework, the biodiversity risk assessment covers our operations and adjacent areas, encompassing a total of 322.2 hectares in Pisco.

This scope is consistent with the impact profile of our steelmaking activities, whose environmental management instruments approved by the competent authorities determined a level of impact on the biological environment classified as “**not significant**.”

Impact Risk

Deterioration of the habitat associated with the perimeter greenbelt as a result of increased atmospheric emissions from the Steel Complex.

Dependency Risk

Disruption of natural pollination processes within the perimeter greenbelt due to the operational activities of the Steel Complex.



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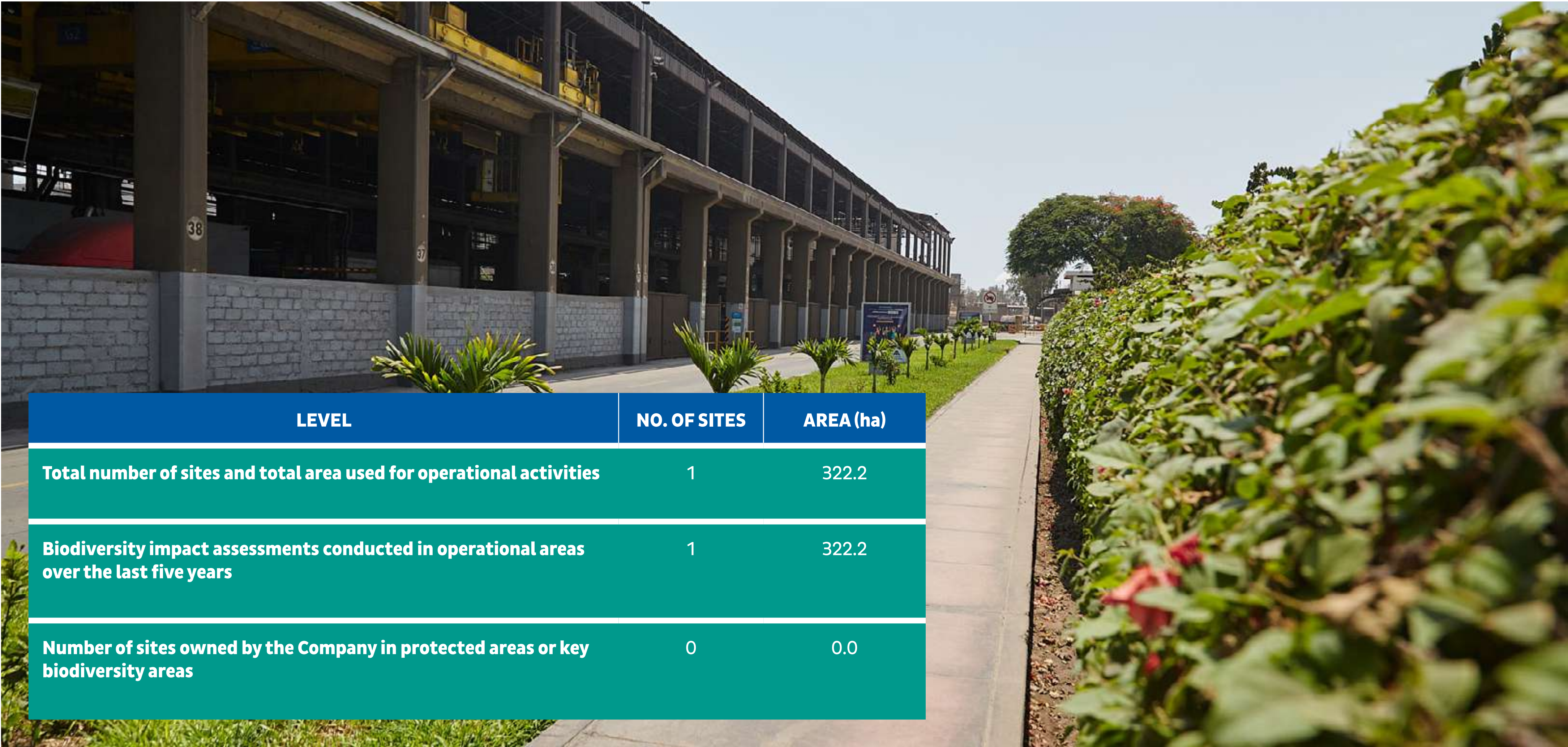
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LEVEL	NO. OF SITES	AREA (ha)
Total number of sites and total area used for operational activities	1	322.2
Biodiversity impact assessments conducted in operational areas over the last five years	1	322.2
Number of sites owned by the Company in protected areas or key biodiversity areas	0	0.0



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ASSESS

Analysis and Assessment

IMPACT AND PROBABILITY

The process of selecting impact assessment methods prioritized the use of methodologies that are accepted, standardized, and recommended by the competent environmental authority (see Annex 11 ). To ensure both a technical and strategic perspective, quantitative environmental impact models were integrated with our corporate risk management methodology.

IMPACT ASSESSMENT:

Two reference methodologies were applied in accordance with the provisions established in our Environmental Management Instruments (EMIs):

> **Leopold Matrix (PAMA):** Applied to the Steel Complex, this methodology identifies and evaluates im-

pacts on each environmental component through a cause-and-effect analysis of operational activities. The model distinguishes significance levels within a range of 0 to 20, allowing impacts to be categorized from “Not Significant” to “Highly Significant.”

> **Conesa Methodology (DAA):** Applied to the San Juan de Buenavista property, this methodology assigns impact levels based on the nature, extent, and persistence of industrial material and co-product storage activities, classifying them as “Significant” or “Not Significant.”

To ensure alignment with the Company's standards, the results of the environmental assessments were harmonized with the GIRO methodology. This equivalency assessment process enabled the translation of technical findings into the corporate criticality levels of Low, Moderate, Considerable, and High (see Annex 8 ). This analysis, which considers both direct and indirect impacts, as well as their positive or negative nature, confirms that CAASA's operational management maintains a controlled and responsible interaction with the environmental components of its surroundings.

LEOPOLD QUANTITATIVE METHODOLOGY	CONESA METHODOLOGY	GIRO METHODOLOGY
Not Significant (0–20)	Low or Minor ($I < 25$)	Low (1)
Slightly Significant (21–40)		
Moderately Significant (41–60)	Moderate ($25 \leq I < 50$)	Moderate (2)
Significant (61–80)	High ($50 \leq I < 75$)	Considerable (4)
Highly Significant (81–130)	Very High ($I \geq 75$)	High (8)



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PROBABILITY ASSESSMENT

Direct and indirect environmental impacts were compared, assessing their positive or negative nature. For this purpose, the Leopold quantitative methodology was applied, enabling the identification and evaluation of impacts on each environmental component or factor potentially affected by the activities, as well as the definition of the qualitative and quantitative interrelationships associated with the current activities of the Steel Complex.

The cause-and-effect analysis between the different stages of the activity and the environmental components enabled the proper identification of direct and indirect environmental impacts, taking into account their positive or negative nature. Within the biological environment of the Steel Complex, a score of 22.9 was obtained, corresponding to a slightly significant impact.

This result is supported by environmental management instruments (EMIs) and by flora and fauna assessments conducted in the evaluated area ([see Annex 12](#) ).

Likewise, in 2016, a slightly significant impact rating was determined, indicating that the area was devoid of vegetation cover. Regarding flora and fauna, few species were identified, none of which belonged to any conservation category.

In addition, in 2018, according to the environmental management instrument entitled “Supporting Technical Report for the Modernization Project of the Steel Plant at Facility No. 02,” the biological environment was assessed using the CONESA methodology, obtaining a score of 22, corresponding to an impact of low significance.

For the industrial and reprocessable materials storage yard, a Technical Legal Report supporting the approval of the Environmental Management Instrument (EMI) indicates that the impact is of slightly significant magnitude, due to the absence of vegetation cover and the lack of significant fauna presence within the assessed area.

Consequently, this impact has been classified as being of low or minor magnitude.

WITHIN THE BIOLOGICAL ENVIRONMENT OF THE STEEL COMPLEX, A SCORE OF 22.9 WAS OBTAINED, CORRESPONDING TO A SLIGHTLY SIGNIFICANT IMPACT.





Finally, considering the results of the studies conducted using the Leopold and CONESA methodologies, together with the probability assessment performed under CAASA’s GIRO methodology, it is concluded that the impact has a low level of criticality.

RISK	ANALYSIS	PROBABILITY	IMPACT	LEVEL
Deterioration of the habitat associated with the perimeter greenbelt as a result of increased atmospheric emissions from the Steel Complex	Our perimeter greenbelt surrounding the Steel Complex extends for 5.8 km; in addition, there are 4.2 km of greenbelt along the perimeter of the former San Juan de Buenavista property. These areas constitute a habitat that supports more than 12 species of flora (including eucalyptus, acacia, among others) and associated fauna. Evidence of species coexisting within this habitat, including species sensitive to steelmaking activities, highlights the importance of implementing conservation measures as operations continue to grow.	Moderate (2)	Low (1)	Low (2)
Disruption of natural pollination processes within the perimeter greenbelt due to the operational activities of the Steel Complex	Our perimeter greenbelt was established more than 30 years ago, primarily using eucalyptus and acacia species. Its ecological sustainability depends on the natural pollination processes that occur in interaction with surrounding ecosystems. In this regard, it has been identified that the stability and functionality of this perimeter greenbelt are directly linked to the conservation of ecosystems adjacent to the Steel Complex.	Moderate (2)	Low (1)	Low (2)





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CONTROL
Response Plans



01

Conserve the biodiversity that coexists with our steelmaking activities as a result of the implementation of the perimeter greenbelt

Promote the importance of biodiversity in collaboration with stakeholders to ensure the long-term conservation of native species within the area of influence of our operations.

02

Promote the collection, analysis, and enhancement of biodiversity information and knowledge in collaboration with experts.

03



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01

Conserve the biodiversity that coexists with our steelmaking activities as a result of the implementation of the perimeter greenbelt

BIODIVERSITY CONSERVATION PROGRAM

The Steel Complex is located in an environment characterized by predominantly desert conditions. As part of our commitment to Biodiversity, we have a Biodiversity Conservation Program in place within our area of influence that includes perimeter greenbelt management, irrigation, maintenance, biological monitoring, the publication of our Biodiversity Guide, and biodiversity conservation signage.

PERIMETER GREENBELT

For more than 20 years, we have maintained a perimeter greenbelt* around the Steel Complex, consisting primarily of two rows of acacia (Acacia) and one row of eucalyptus (Eucalyptus). This environmental management measure aims to create vegetative cover in an area originally devoid of vegetation, transforming the landscape and improving local environmental conditions.

Currently, the greenbelt extends approximately 10 km (60% within the Steel Complex and 40% within

the Buenavista Property). The creation of these new habitats has enabled the establishment of local and migratory wildlife. Semiannual environmental monitoring has identified the presence of at least 16 species of birds and reptiles, demonstrating a net improvement in biodiversity within the area.

EXPANSION OF THE PERIMETER GREENBELT

As part of our commitment to continuous improvement and to achieve our objective of increasing a net positive impact on biodiversity by 2026, we have been expanding our perimeter greenbelt since 2021 in the Industrial By-products Storage Area (SPI).

This initiative will add 0.95 km to the greenbelt by 2026. As of the end of 2025, the plan had reached 80% progress, supported by the eucalyptus trees planted having reached an average height of 8 meters. A minimum height of 10 meters is required for trees to be considered part of the greenbelt. A detailed activity plan is presented on page 40.



*A tree is considered part of the greenbelt once it exceeds 10 meters in height. Average growth time is estimated at five years.



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To achieve this, the following activities are carried out:

- > **Controlled Irrigation:** Optimization of water resources in a desert environment.
- > **Pruning and Cleaning:** Silvicultural management to promote vertical growth and increased foliage density.
- > **Biological Monitoring:** Monitoring and tracking of species diversity, abundance, and distribution

For 2026, CAASA reaffirms its commitment to continuing management and maintenance activities, ensuring that the greenbelt continues to function as an operational green lung and an effective environmental protection barrier.



Objective

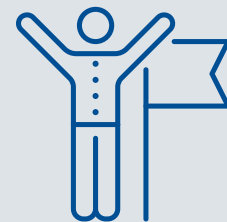
Increase net biodiversity improvement in the area through the implementation of greenbelts within the industrial by-products storage area.

Duration

2021-2026

Progress

80 %





80%
PROGRESS OF
THE GREENBELT
MAINTENANCE AND
EXPANSION PLAN

ACTIVITIES	2021	2022	2023	2024	2025	2026
Additional planting of the perimeter greenbelt in the Industrial By-products Storage Area (SPI)*	✓	✓				
Irrigation and maintenance of the entire greenbelt, including the SPI greenbelt plantation*		✓	✓	✓	✓	
Biological monitoring of flora and wildlife fauna*		✓	✓	✓	✓	
Development and publication of the “CAASA Biodiversity Guide”			✓	✓		
Biodiversity conservation signage*	✓	✓	✓	✓	✓	



* Activities related to greenbelt maintenance and carried out continuously every year.



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**BIODIVERSITY CONSERVATION
SIGNAGE AND AWARENESS**

CAASA implemented strategic environmental awareness actions by installing signage at key locations throughout its facilities to protect local wildlife, including the prohibition of hunting, regulation of horn use, and the establishment of speed limits. These measures aim to reduce the impacts generated by operational activities and ensure a safe and harmonious environment.

In addition, visual materials highlighting the biodiversity present within the perimeter greenbelt were incorporated at the corporate headquarters, reinforcing awareness and appreciation of the ecosystem among employees and visitors. Together, these initiatives strengthen a responsible and proactive organizational culture aligned with the conservation of the natural environment, sustainability, and the Company’s environmental commitment.

THESE MEASURES AIM TO REDUCE
THE IMPACTS GENERATED BY
OPERATIONAL ACTIVITIES.





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Promote the importance of biodiversity in collaboration with stakeholders to ensure the long-term conservation of native species within the area of influence of our operations.



TRAINING PROGRAMS

As part of our Biodiversity Conservation Program, we have been conducting biological monitoring activities on a semiannual basis.

The results of these activities have served as input for the development of the “CAASA Biodiversity Guide,” which aims to document and disseminate information on the diversity of species present within the Steel Complex, as well as their characteristics and potential threats that could lead to a risk of extinction within the direct area of influence of our operations.

The guide consolidates scientific information on the flora and fauna species recorded within the Steel Complex, including technical datasheets detailing their taxonomic classification, threat category, and main characteristics. This material serves as a key tool for biodiversity inventories, monitoring programs, and studies.

Additionally, outreach initiatives have been implemented for stakeholders, including employees

and suppliers, through content available on the Company's YouTube channel. These initiatives strengthen knowledge management and promote greater environmental awareness both within and outside the organization.

BIODIVERSITY CONSERVATION AT CAASA

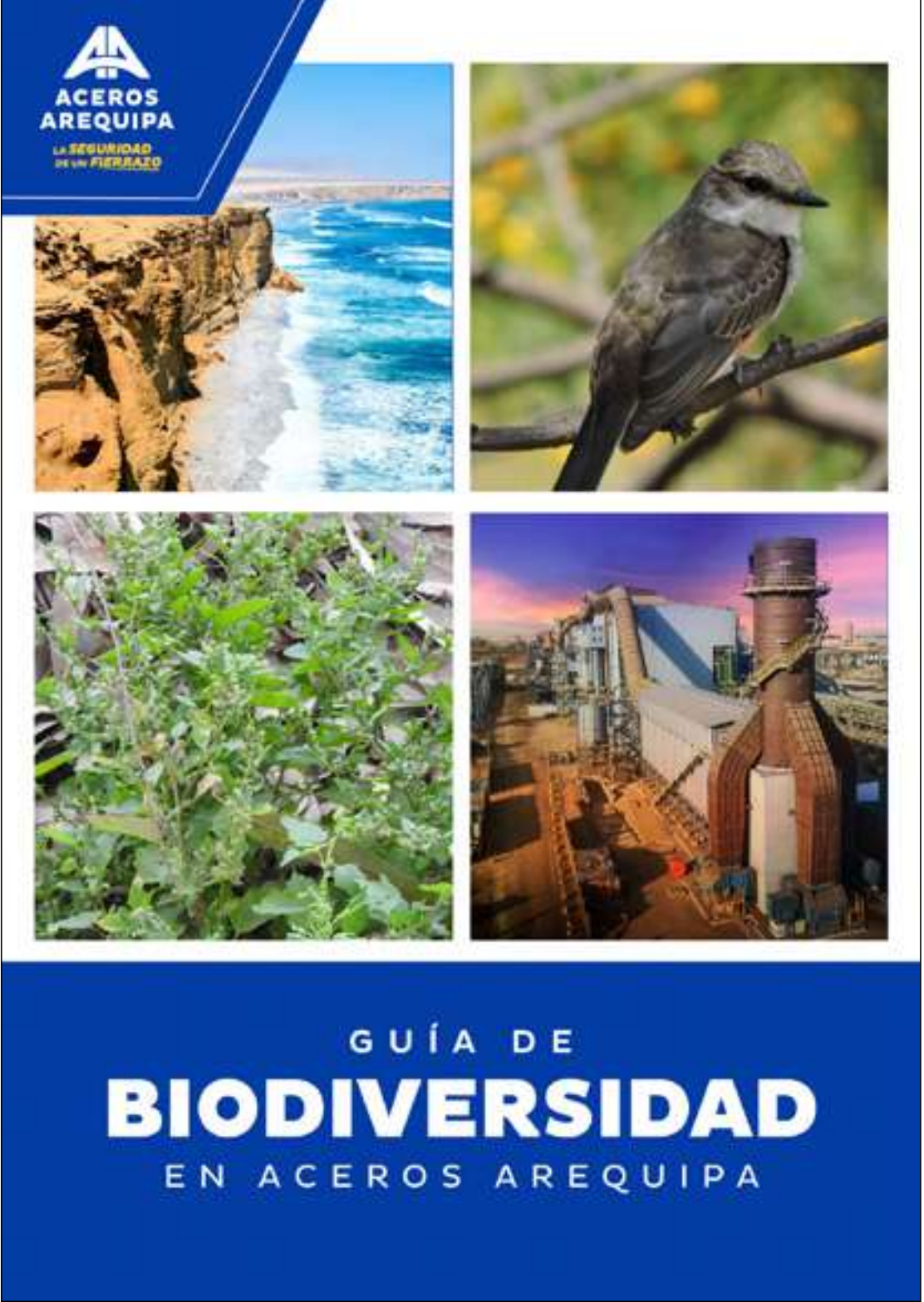
[Watch video](#)

LET'S PRESERVE THE PARACAS NATIONAL RESERVE

[Watch video](#)

BIODIVERSITY GUIDE

[Check the guide](#)





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**FLORA INVENTORY AT
THE STEEL COMPLEX**

Based on the inventory conducted in 2024, the flora inventory of the Steel Complex identifies 20,122 trees and shrubs belonging to 24 species, introduced both through our afforestation efforts and through natural pollination processes (see Annex 13). This demonstrates that our steelmaking activities can coexist with the development of these species.

SAVE THE HUMMINGBIRD PROJECT

Since 2018, we have promoted the “Save the Hummingbirds” program in the province of Pisco, a strategic initiative dedicated to biodiversity conservation in the coastal desert.

This project focuses on the protection of five hummingbird species and on transforming educational institutions into living classrooms. Through the establishment of gardens with native species (huarango, molle, lucraco, tobacco plant, galvezia, and cahuato) and complementary species, we create biological refuges that strengthen the local ecosystem.

We have successfully integrated the program into the learning sessions of two educational institutions in key subjects such as Mathematics, Science and

Technology, and Communication, ensuring that the conservation message becomes part of students’ comprehensive education.

This initiative demonstrates how CAASA creates shared value by fostering environmentally responsible citizenship and helping to protect Pisco’s natural heritage.

To support this effort, four training and awareness sessions were conducted, reaching more than 8,000 members of the educational community.

**THIS PROJECT FOCUSES ON THE PROTECTION
OF FIVE HUMMINGBIRD SPECIES AND
ON TRANSFORMING EDUCATIONAL
INSTITUTIONS INTO LIVING CLASSROOMS**





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2025 MILESTONES AND RECOGNITIONS

Our commitment to environmental education in the institutions participating in the program has generated outstanding results at the national level:

Environmental Leadership: We proudly celebrate that Educational Institution No. 22455 “José de la Torre Ugarte,” an active participant in the program, achieved first place nationwide for outstanding environmental achievements in 2025.

Institutional Projects: Julio C. Tello Educational Institution of Pisco has consolidated two strategic projects aligned with our objectives:

- > “Save the Hummingbirds: Education and Action for Hummingbird Conservation in Our Community”.
- > “Living Colors to Protect Hummingbirds and Green Areas” (Comprehensive Environmental Education Project).

Through these initiatives, CAASA reaffirms its commitment to creating shared value by integrating the preservation of natural capital with the educational and social development of the communities within our area of influence.



2 EDUCATIONAL
INSTITUTIONS
IMPLEMENTED THE PROGRAM

4 TRAINING
AND AWARENESS SESSIONS WERE CONDUCTED

MORE THAN 8,000
MEMBERS OF THE EDUCATIONAL
COMMUNITY RECEIVED TRAINING

03

Promote the collection, analysis, and enhancement of biodiversity information and knowledge in collaboration with experts

INTEGRATED MANAGEMENT PLAN FOR THE MARINE-COASTAL ZONE

The Integrated Management Plan for the Marine-Coastal Zone (PMIZMC) is a planning instrument that brings together outcomes, products, and activities aimed at generating positive changes within marine-coastal zones (MCZs), linked to the conservation of ecosystems and the services they provide. The formulation of this plan arose from a need identified and declared of provincial interest in 2020.

Subsequently, during 2020 and 2021, technical advisory sessions were held with the Ministry of the Environment (MINAM). Within this framework, in April 2021, the Local Management Committee for the Integrated Management of the Pisco-Paracas Marine-Coastal Zone was established, comprising 42 representatives, including members of the Riparian Wetlands Technical Committee, of which CAASA is an active participant.

This committee conducted several working sessions for the development of the plan, following a methodological roadmap structured into three phases: (i) preparation,

focused on establishing enabling conditions; (ii) planning, focused on problem analysis and defining proposed changes; and (iii) approval, corresponding to the formalization and validation of the plan. As a result of this process, the “Proposal for the Integrated Management Plan for the Pisco-Paracas Marine-Coastal Zone” was completed in May 2021.

This instrument represents the joint effort and commitment of public and private institutions at the regional and local levels, as well as organized civil society, technical groups, and working teams such as the Regional Technical Group (RTG) and the Local Management Committee (LMC). It also received technical assistance from MINAM, support from the EbAMar Project (“Ecosystem-based Adaptation Measures for the Integrated Management of Marine-Coastal Zones”), and was led by the Provincial Municipality of Pisco.

This plan was developed through a participatory process involving the members of the Local Management Committee, with technical assistance from the General Directorate of Citizen Services, Environment and Public



Safety of the Provincial Municipality of Pisco, as well as support from the Natural Resources and Environmental Management Office of the Regional Government of Ica.

The plan also includes the applicable regulatory framework, the methodological approach employed, the analysis of the Integrated Management Unit (IMU), and the proposed change initiative. At this stage, the desired change is defined, key issues are analyzed, and the change pathway and planning matrix are developed. As a result, 26 issues were identified and prioritized through a structural analysis aimed at establishing effective coordination mechanisms at strategic points.

The objective of the Integrated Management Plan for thePisco-ParacasMarine-CoastalZoneistocontribute to improving access to and the sustainable use of resources within marine-coastal zones (MCZs) through an ecosystem-based approach, while also promoting governance in the Pisco marine-coastal zone.

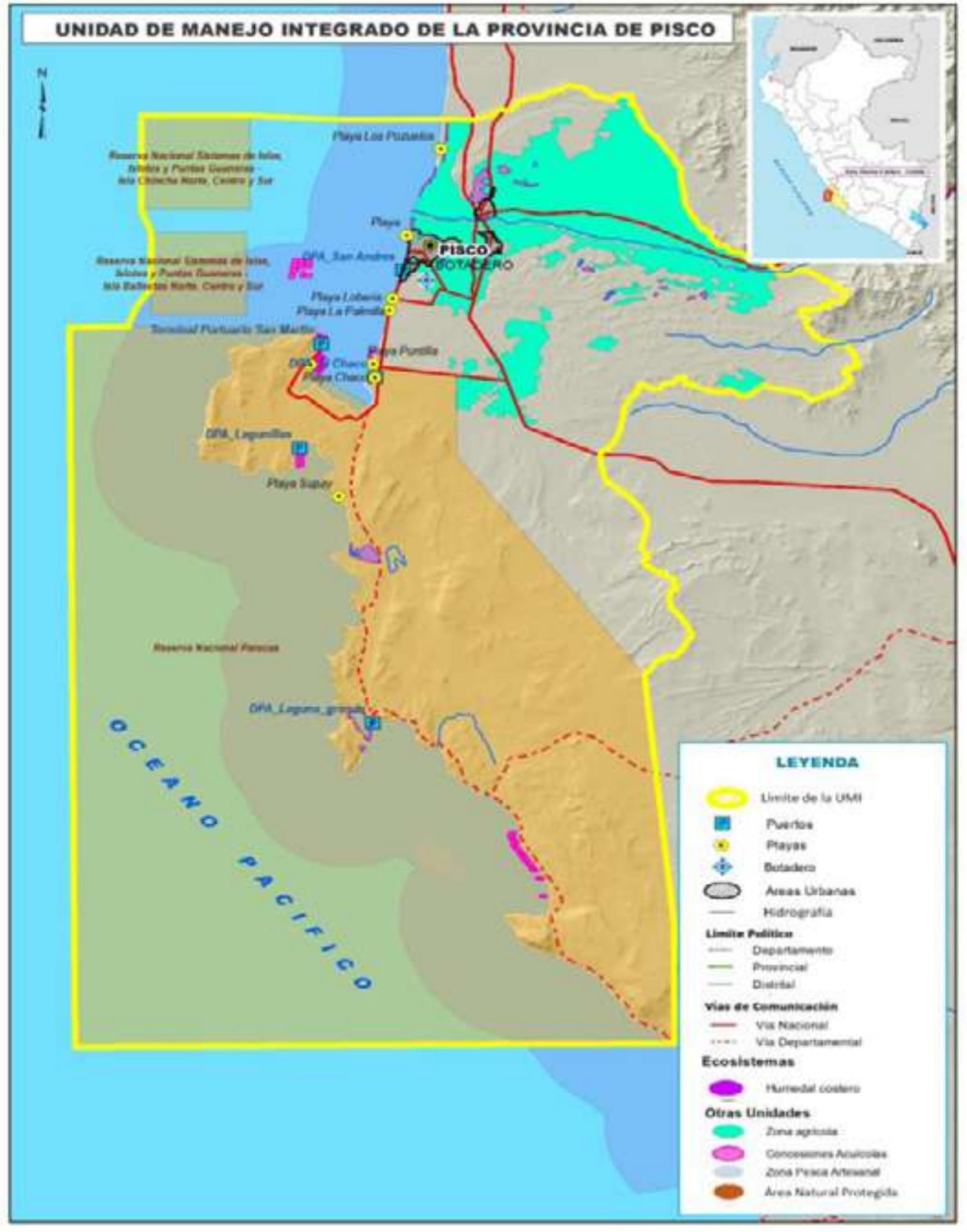
The plan guides local management by taking into consideration existing planning instruments, such as development plans and the master plans of the Paracas National Reserve and the System of Islands, Islets and Guanera Headlands, which contribute to the sustainable development of the marine-coastal zone. It also establishes eight strategic objectives for the Pisco-Paracas Integrated Management Unit (IMU).

In 2021, MINAM's General Directorate of Environmental Territorial Planning issued a report concluding that the PMIZMC Pisco-Paracas proposal complied with the technical requirements

corresponding to the preparation and planning phases. These included the definition and characterization of integrated management units, problem analysis, definition of the desired change, development of the change pathway, and the establishment of indicators and the planning matrix.

After obtaining MINAM's favorable opinion in accordance with the applicable regulatory framework, the technical approval process was successfully completed. Consequently, on September 30, 2021, Ordinance No. 014-2021-MPP was issued, formally approving the Pisco-Paracas Integrated Management Plan for the Marine-Coastal Zone (PMIZMC).

Source: Local Management Committee for the Integrated Management of the Pisco-Paracas Marine-Coastal Zone.





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8 STRATEGIC OBJECTIVES
FOR THE PISCO-PARACAS
INTEGRATED MANAGEMENT
UNIT

Promote the conservation of ecosystems and their biodiversity (wetlands, islands, and beaches). 01

Strengthen governance for the adequate management of the Marine-Coastal Zone (MCZ). 02

Improve solid waste disposal. 03

Increase and optimize wastewater treatment coverage. 04

Improve sanitary conditions in Lagunillas, Laguna Grande, and San Andrés. 05

Improve sanitary conditions in Lagunillas, Laguna Grande, and San Andrés. 06

Reduce unplanned urban expansion and inadequate road development within the MCZ. 07

Increase public environmental awareness regarding the protection of ecosystems. 08



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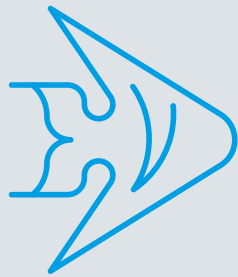
MONITOR

Monitoring and Follow-up

SCOPE

As its primary environmental control measure, CAASA conducts two semiannual biological monitoring assessments of wild flora and fauna each year within its 322.2-hectare area of influence.

This program, developed using qualitative and quantitative approaches, aims primarily to assess biodiversity indices and ensure compliance with current regulations regarding protected or threatened species. The monitoring program is structured around the following technical pillars:



ECOSYSTEM CHARACTERIZATION →

Describe the life zones present using the Holdridge methodology, detailing the vegetation formations and flora species recorded within the study area.



TAXONOMIC INVENTORY →

Develop detailed fauna records, with particular emphasis on avifauna and herpetofauna.



COMMUNITY ANALYSIS →

Assess the composition, richness, and abundance of the biological communities identified.



DIVERSITY ASSESSMENT →

Estimate alpha and beta diversity indices using field-collected data, enabling an accurate diagnosis of biological variability.



REGULATORY SURVEILLANCE →

Consolidate the species inventory by identifying their conservation or threat status, ensuring strict alignment with the environmental legal framework.



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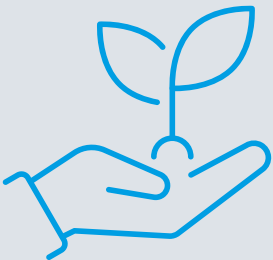
METHODOLOGY

Expert Advisory and Validation

The monitoring program was developed in collaboration with SGS del Perú, with the guidance of biology specialists. The methodological design was based on the establishment of strategic sampling stations ([see Annex 14](#) ) to measure impact and the effectiveness of risk controls across different environmental units: plains, desert slopes with xerophytic vegetation, and cultivated areas.

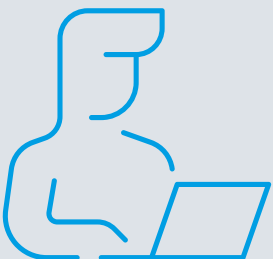
The monitoring process was structured into two main stages: fieldwork and post-fieldwork.

SAMPLING STATIONS	
AAF-4 Control	Plains and desert slopes with sparse vegetation
AAO-4 Impact	Plains and desert slopes with sparse vegetation
AAO-3 Impact	Cultivated areas
MB-1c Contro	Cultivated areas



FIELDWORK

- > Avifauna
- > Herpetofauna



POST-FIELDWORK

- > Diversity indices: alpha and beta
- > Protected species





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FIELDWORK PHASE

During the fieldwork phase, standardized collection and observation methods were applied, based on official guidelines and specialized scientific literature. Sampling effort was distributed across georeferenced stations strategically established according to the vegetation units identified within the study area, applying monitoring methods and tools. [\(see Annex 15 !\[\]\(b6653e5251dc87b32333cc6f132d29aa_img.jpg\)\).](#)

GENERAL COLLECTIONS (QUALITATIVE MONITORING):

Consisted of systematic surveys across the different vegetation units for the taxonomic and photographic recording of species. Relevant morphological characteristics were documented for subsequent identification using specialized literature and consultation with experts.

TRANSECTS (QUANTITATIVE MONITORING):

Based on the MINAM Flora and Vegetation Inventory Guide (2015) and the methodology developed by Mateucci & Colma (1982). Thirty-meter transects were established using a measuring tape, recording the presence and frequency of species at one-meter intervals. At least one transects was established at each georeferenced station.



FLORA ASSESSMENT

A mixed approach was used to ensure a comprehensive species inventory.



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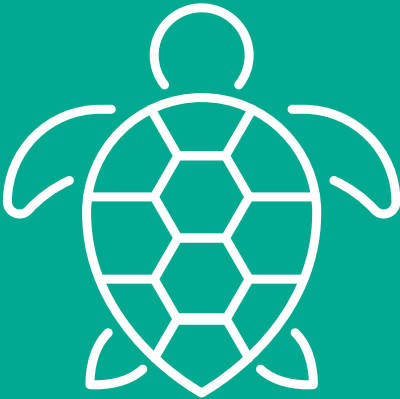
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AVIFAUNA (BIRDS):

To maximize the accuracy of records, both direct and indirect observation techniques were combined:

Sampling Design: The unlimited-distance point count technique was applied (Reynolds et al., 1980; Bibby et al., 2000). A transect consisting of 10 count points separated by a minimum distance of 100 m was established.

Field Protocol: Surveys were conducted between 05:30 and 09:30 hours, coinciding with peak vocal activity. Binoculars and reference field guides (Schulenberg et al.) were used, and visual detections, auditory detections, and indirect evidence (tracks and nests) were recorded in accordance with the classification of the South American Classification Committee.



FAUNA ASSESSMENT_{Las}
Assessments were conducted at
georeferenced sampling stations
established according to the vegetation
units identified within the study area for:

HERPETOFAUNA (AMPHIBIANS AND REPTILES):

The Visual Encounter Survey (VES) method (Crump & Scott, 1994) was applied:

Survey Effort: Standardized assessments lasting 20 to 30 minutes per station were conducted during both daytime and nighttime periods.

Technique: A slow and steady search was carried out to locate specimens in low vegetation and potential refuges. Sampling units maintained a minimum separation distance of 50 meters from one another.





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POST-FIELDWORK PHASE

The information collected was systematically processed to determine ecosystem health through the following indicators.

A. POPULATION PARAMETERS

The analysis included the calculation of population density and relative density (RD), making it possible to quantify the proportion of each species or family relative to the total biological community.

$$RD = (\text{Absolute density of the species} / \text{Total density of species}) \times 100$$

(ver anexo 16 )

B. DIVERSITY INDICES

Diversity was assessed through alpha and beta diversity indices, detailed in **(see Annex 16)**. While alpha diversity enabled the analysis of species richness and relative abundance within each specific habitat to identify dominance indicators, beta diversity facilitated the measurement of species turnover rates among different environmental units, providing a comprehensive assessment of ecosystem health within the area of influence.



INDICATORS



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**SPECIES UNDER CONSERVATION
AND PROTECTION CATEGORIES**

To ensure responsible biodiversity management and compliance with CAASA’s environmental commitments, the inventory of flora and fauna species identified within the assessment areas was cross-referenced against national and international regulatory frameworks.

This analysis makes it possible to determine the protection status of the biodiversity identified, ensuring that the organization's activities are carried out under the highest standards of biological conservation. At the national level, verification was conducted in accordance with current Peruvian legislation, specifically Supreme Decree No. 043-2006-AG, which establishes the categorization of threatened wild flora species, and Supreme Decree No. 004-2014-MINAGRI, which updates the list of legally protected wild-life species.

In addition, global assessment criteria were incorporated, including the International Union for Conservation of Nature (IUCN) Red List (2020-1), which provides the most comprehensive scientific basis for assessing extinction risk worldwide.

Likewise, the guidelines of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES 2019) were considered through a comprehensive review of its three appendices, ranging

from species facing the highest risk of extinction (Appendix I) to those whose trade must be strictly regulated to prevent them from reaching such status (Appendices II and III).

Finally, the analysis incorporated the Convention on the Conservation of Migratory Species of Wild Animals (CMS 2018), given the biological relevance of the area for migratory species passing through the national territory.

This multidimensional approach not only ensures legal compliance but also strengthens the Company's performance in sustainability and biodiversity protection indicators, which are key pillars of its corporate responsibility strategy.

THIS ANALYSIS MAKES IT
POSSIBLE TO DETERMINE THE
PROTECTION STATUS OF THE
BIODIVERSITY IDENTIFIED.

MONITORING RESULTS

The findings derived from biological monitoring conducted on the plains and desert slopes within the area of influence reflect the biotic composition characteristic of ecosystems with sparse vegetation cover.

Through the four established sampling stations, technical information on flora, avifauna, and herpetofauna was consolidated, with details on species richness and abundance presented in the following tables. A technical and photographic record documenting the identified flora and fauna species is also included ([see Annex 17](#)), serving as visual evidence of the state of biodiversity within the area during the assessment period, together with the monitoring results for each sampling station ([see Annex 18](#)).





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2025 FLORA MONITORING RESULTS (PLANTS)

	FIRST HALF OF 2025	SECOND HALF OF 2025
Recorded species	15 vascular plant species distributed across 2 classes, 8 orders, and 11 botanical families.	23 vascular plant species distributed across 2 classes, 10 orders, and 13 botanical families.
Species richness by vegetation unit	Desert plains and slopes: 9 species distributed across 9 genera and 8 families. Cultivated areas: 9 species distributed across 9 genera and 9 families.	Desert plains and slopes: 9 species distributed across 9 genera and 8 families. Cultivated areas: 9 species distributed across 9 genera and 9 families.
Diversity indices	Low for all stations. Simpson Index: between 0.40 and 0.57 bits/ind. Highest value: 0.57 bits/ind at station AAO-3.	Low for all stations. Simpson Index: between 0.71 and 0.86 bits/ind. Highest value: 0.86 bits/ind at station AAF-4.
Species within Least Concern categories	7 species	13 species
Species listed under CITES Appendices (*)	Not recorded	Not recorded
Endemic species	Not recorded	Not recorded



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2025 AVIFAUNA MONITORING RESULTS (BIRDS)

	FIRST HALF OF 2025	SECOND HALF OF 2025
Recorded species	14 bird species distributed across 5 orders and 11 families. Best represented order: Passeriformes (60.00%).	18 bird species distributed across 7 orders and 14 families. Best represented order: Passeriformes (60.00%).
Taxonomic families (highest number of species)	Family Columbidae: 21.43%	Family Columbidae: 21.43%
Diversity values obtained	Cultivated areas: > MB-1 control Control Station recorded 5 species and 17 individuals. > AAO-3 impact Station recorded 3 species and 19 individuals. Plains and slopes: > AAO-4 Impact Station recorded 12 species and 101 individuals. > AAF-4 Control Station recorded 7 species and 87 individuals.	Cultivated areas: > MB-1 Control Station recorded 5 species and 17 individuals. > AAO-3 Impact Station recorded 3 species and 19 individuals. Plains and slopes: > AAO-4 Impact Station recorded 7 species and 87 individuals. > AAF-4 Control Station recorded 12 species and 101 individuals.
Most abundant species	> West Peruvian Dove (Zenaida meloda) (27.23%).	> Peruvian Ground Dove (Columbina cruziana) (32.41%).
Diversity indices	AAO-4 Station: most diverse, intermediate level*. AAO-3 Station: least diverse, intermediate level**.	> AAF-4 Station: most diverse, intermediate level*. > AAO-3 Station: least diverse, intermediate level**.
Species within conservation lists/categories	All species fall within the Least Concern (LC) category, indicating that none of the species are threatened.	Most species fall within the Least Concern (LC) category.
Species listed under the CITES Appendices (*)	Rufous-tailed Hummingbird (Amazilis amazilia), Purple-collared Woodstar (Myrtis fanny), and American Kestrel (Falco sparverius).	Rufous-tailed Hummingbird (Amazilis amazilia), Purple-collared Woodstar (Myrtis fanny), Oasis Hummingbird (Thaumastura cora), and American Kestrel (Falco sparverius).
Endemic species	Peruvian Miner (Geositta peruviana).	Peruvian Miner (Geositta peruviana).

* Shannon-Wiener Index: H' = 3.25 bits/ind.** Shannon-Wiener Index: H' = 1.19 bits/ind.



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2025 HERPETOFAUNA MONITORING RESULTS (AMPHIBIANS AND REPTILES)

	FIRST HALF OF 2025	SECOND HALF OF 2025
Recorded species	3 reptile species belonging to the order Squamata and the family <i>Teiidae</i> .	2 reptile species belonging to the order Squamata and the families Tropiduridae and <i>Teiidae</i> .
Taxonomic families (highest number of species)	Desert plains and slopes: 1 species distributed across 1 genus and 1 family. Cultivated areas: 3 species distributed across 3 genera and 3 families.	Desert plains and slopes: 1 species distributed across 1 genus and 1 family. Cultivated areas: 2 species distributed across 2 genera and 2 families.
Diversity values obtained	Highest richness and abundance recorded in plains and slopes at: > AAF-4 Control: 1 species and 1 individual. Cultivated areas at: > MB-1 Control: 3 species and 6 individuals.	Highest richness and abundance recorded in plains and slopes at: > AAF-4 Control: 1 species and 7 individual. Cultivated areas at: > MB-1 Control: 2 species and 18 individuals.
Most abundant species	Grassland Lizard (<i>Microlophus thoracicus</i>) (57.14%) .	Grassland Lizard (<i>Microlophus thoracicus</i>) (53.57%)
Diversity indices	MB-1c Station: most diverse, intermediate level***.	MB-1c Station: most diverse, intermediate level****.
Species within categories/lists	The Red-headed Lizard (<i>Dicrodon heterolepis</i>), <i>Phyllodactylus gerrhopygus</i> , and the Grassland Lizard (<i>Microlophus thoracicus</i>) are included in the MINAGRI list and classified as Least Concern (LC).	The Red-headed Lizard (<i>Dicrodon heterolepis</i>) is included in the MINAGRI list and classified as Least Concern (LC).
Species listed under the CITES Appendices (*)	Not recorded.	Not recorded.
Endemic species	Grassland Lizard (<i>Microlophus thoracicus</i>) and Red-headed Lizard (<i>Dicrodon heterolepis</i>).	Grassland Lizard (<i>Microlophus thoracicus</i>) and Red-headed Lizard (<i>Dicrodon heterolepis</i>).

*** (Shannon-Wiener Index: H' = 1.46 bits/ind). **** (Shannon-Wiener Index: H' = 0.96 bits/ind).



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These results reaffirm CAASA's commitment to achieving a net positive impact on biodiversity by 2026 and to maintaining these achievements beyond that year, demonstrating that the steel industry can operate in harmony with nature.

Thanks to the effectiveness of the preventive measures implemented, corrective actions have not been required. Instead, CAASA proactively advances its Greenbelt Maintenance and Expansion Plan within its area of influence, which has achieved 80% progress. This progress is also supported by the expansion of the greenbelt in the industrial by-products storage areas, which will add 0.95 km to the existing greenbelt. Eucalyptus trees with an average height of approximately 8 meters have already been established. By creating tree cover in previously non-vegetated areas, new habitats have been generated for local wildlife—particularly birds and reptiles—as well as strategic resting areas for migratory species.

The environmental impact assessment, supported by fieldwork, identified that the establishment and maintenance of the greenbelt has encouraged the presence of species in areas adjacent to the steelmaking operation. To ensure responsible management, semiannual biological monitoring activities are conducted with the support of experts, confirming that none of the recorded species are classified under conservation or threat categories according to current regulations.

The identified biodiversity risks—habitat deterioration (impact risk) and disruption of natural pollination processes (dependency risk) within the perimeter greenbelt—were assessed and classified as having a low level of criticality.

CAASA's operation is located more than 2.16 km from the Paracas National Reserve (PNR), while the storage of industrial and reprocessible materials is carried out within the buffer zone under a compatible zoning designation and supported by an environmental impact assessment that classifies its biological impact as not significant.

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ANNEXES





ANNEX 1

GLOBAL RISKS ACCORDING TO THE WORLD ECONOMIC FORUM

CURRENT GLOBAL RISK LANDSCAPE 2026 →

1	Goeconomic Confrontation
2	State-Based Armed Conflict
3	Extreme Weather Events
4	Societal Polarization
5	Misinformation and Disinformation
21	Biodiversity Loss and Ecosystem Collapse

SHORT-TERM GLOBAL RISKS (2-YEAR HORIZON) →

1	Goeconomic Confrontation
2	Misinformation and Disinformation
3	Societal Polarization
4	Extreme Weather Events
5	State-Based Armed Conflict
26	Biodiversity Loss and Ecosystem Collapse

LONG-TERM GLOBAL RISKS (10-YEAR HORIZON) →

1	Extreme Weather Events
2	Biodiversity Loss and Ecosystem Collapse
3	Critical Changes to Earth Systems
4	Misinformation and Disinformation
5	Adverse Outcomes of AI Technologies
6	Natural Resource Shortages

■ Economic ■ Environmental ■ Geopolitical ■ Societal ■ Technological



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ANNEX 2

CATEGORIZATION OF PROTECTED NATURAL AREAS

CLASSIFICATION	CATEGORIES	CONSIDERATIONS AND INCLUDED ZONES
ADMINISTRATION	> Private Conservation > Regional Public Domain > National Public Domain	Private Conservation: restrictions on land use and compensatory measures to ensure the preservation of biodiversity within the area.
USE	> Direct Use > Indirect Use	> Designated for non-invasive scientific research, recreation, and tourism. > Extraction of resources and any modification of the natural environment are prohibited. > Includes national parks, national sanctuaries, and historical sanctuaries.
ZONING	According to requirements and objectives: Buffer Zones and Areas Adjacent to Protected Natural Areas	> Activities carried out within buffer zones must not jeopardize the achievement of the objectives of the Protected Natural Area (PNA). > Ecotourism, recovery of flora and fauna populations, recognition of private conservation areas, conservation and environmental service concessions, habitat research and restoration, development of agroforestry systems, among other activities, are promoted.



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ANNEX 3

SPECIES IN THE PARACAS NATIONAL RESERVE

GROUP	SPECIES
Birds	Chilean Flamingo (<i>Phoenicopterus chilensis</i>), Humboldt Penguin (<i>Spheniscus humboldti</i>), Peruvian Diving Petrel (<i>Pelecanoides garnotii</i>), Inca Tern (<i>Larosterna inca</i>), and occasionally the Andean Condor (<i>Vultur gryphus</i>). The area is also home to South American Fur Seals (<i>Arctocephalus australis</i>), South American Sea Lions (<i>Otaria byronia</i>), and the Marine Otter (<i>Lontra felina</i>). In marine waters, Humpback Whales (<i>Megaptera novaeangliae</i>), Bottlenose Dolphins (<i>Tursiops truncatus</i>), and Dusky Dolphins (<i>Lagenorhynchus obscurus</i>) can also be observed.
Fish	Sole (<i>Etropus extenes</i>), Smoothhound Shark (<i>Mustelus whitneyi</i>), Bonito (<i>Sarda chilensis</i>), Tramboyo, Stingray, Chita, Sardine, Anchovy (<i>Engraulis ringens</i>), Pampanito, Grouper, Corvina, Lorna, and other species.
Mammals	South American Sea Lion (<i>Otaria byronia</i>), South American Fur Seal (<i>Arctocephalus australis</i>), Common Dolphin (<i>Delphinus delphis</i>), and the endangered Marine Otter (<i>Lontra felina</i>).
Reptiles and Mollusks	Leatherback and Green Sea Turtles; reptiles such as lizards (<i>Microlophus</i> spp.) and geckos (<i>Phyllodactylus</i> spp.); as well as mollusks including octopuses, squid (<i>Loligo gahi</i>), clams, and crustaceans such as the Ghost Crab (<i>Ocypode gaudichaudii</i>), Violet Crab (<i>Platyxanthus orbignyi</i>), and Mole Crab (<i>Emerita analoga</i>), among others.



ZONING OF THE PARACAS NATIONAL RESERVE

Areas dedicated to the conservation of fragile ecosystems where only scientific research and environmental management activities are permitted, while all other human activities are restricted.

- > Paracas Bay Wetland
- > Gran Gallán Island (terrestrial portion) and surrounding islets
- > Cerro Lechuza
- > Punta Arquillo (cliff and rocky intertidal zone)
- > Flamingo Lagoon
- > Tres Puertas (cliff area)
- > Independencia Island (northern sector)
- > Morro Quemado

Areas consisting of minimally disturbed natural environments where the conservation of pristine landscapes is prioritized, allowing only low-impact activities such as research, environmental education, and specialized management.

- > Paracas Bay (marine and terrestrial areas)
- > Coastal desert (tern breeding area)
- > Independencia Island
- > Red Beach
- > San Gallán Island and Morro Quemado
- > “El Maldito” Hill
- > Punta Mendieta, Punta Sacasemita, Punta Cielo, Punta Prieta, and the Los Frailes, Santa María, and La Esperanza cliffs
- > Coastal Desert

Areas designated for the sustainable and regulated use of renewable natural resources, such as artisanal fishing or managed harvesting activities, always under SERNANP regulations and guidelines.

- > Otuma concession (salt extraction)
- > Beach areas for passive macroalgae collection
- > El Negro – Antana
- > All marine areas not included in other zoning categories
- >
- > Southern sector of Independencia Island
- > Santa Rosa Island and surrounding islets
- > San Gallán Island



04

TOURISM AND RECREATIONAL USE ZONE (TR)

Areas designated for controlled nature tourism and recreational activities under sustainability and carrying-capacity criteria..



- > La Mina – Raspón
- > Catedral – Supay
- > Red Beach
- > Isthmus Viewpoint, Lagunillas, and Santa María
- > Santo Domingo and Carhuaz Beach
- > Administrative Headquarters, Site Museum, and “La Aguada” Viewpoint
- > Rancherío
- > Yumaque
- > Barlovento
- > Tourist trails and Mendieta parking area
- > Santo Domingo Bay, Atenas, Candelabro (marine area)
- > Carhuaz Beach and promenade
- > Lagunillas Beach
- > Cerro Maldito
- > Playón–Mendieta Beaches
- > Turritelas

05

RECOVERY (REC)

Altered or degraded areas designated for ecological restoration or passive recovery in order to rehabilitate habitats necessary for wild flora and fauna.



- > Laguna Grande Pool
- > Atenas
- > Lagunillas

06

SPECIAL USE (SU)

Areas with pre-existing rights and essential infrastructure for reserve management, including surveillance services, road networks, and mariculture concessions.



- > Independencia and Santa Rosa Islands
- > QUIMPAC
- > Mariculture concessions in Raspón and El Queso (scallop farming)
- > “El Polígono” Sector
- > Coastal Desert
- > Road Network
- > “Morro de Sal” Sector – Bay Area
- > Santo Domingo Residential Development
- > Private Properties

07

HISTORICAL-CULTURAL (HC)

Historical-cultural areas designated for the protection of archaeological remains, paleontological resources, and cultural heritage assets located within the protected natural area.



- > Coastal Desert Historical
- > Cultural Area (archaeological zones)

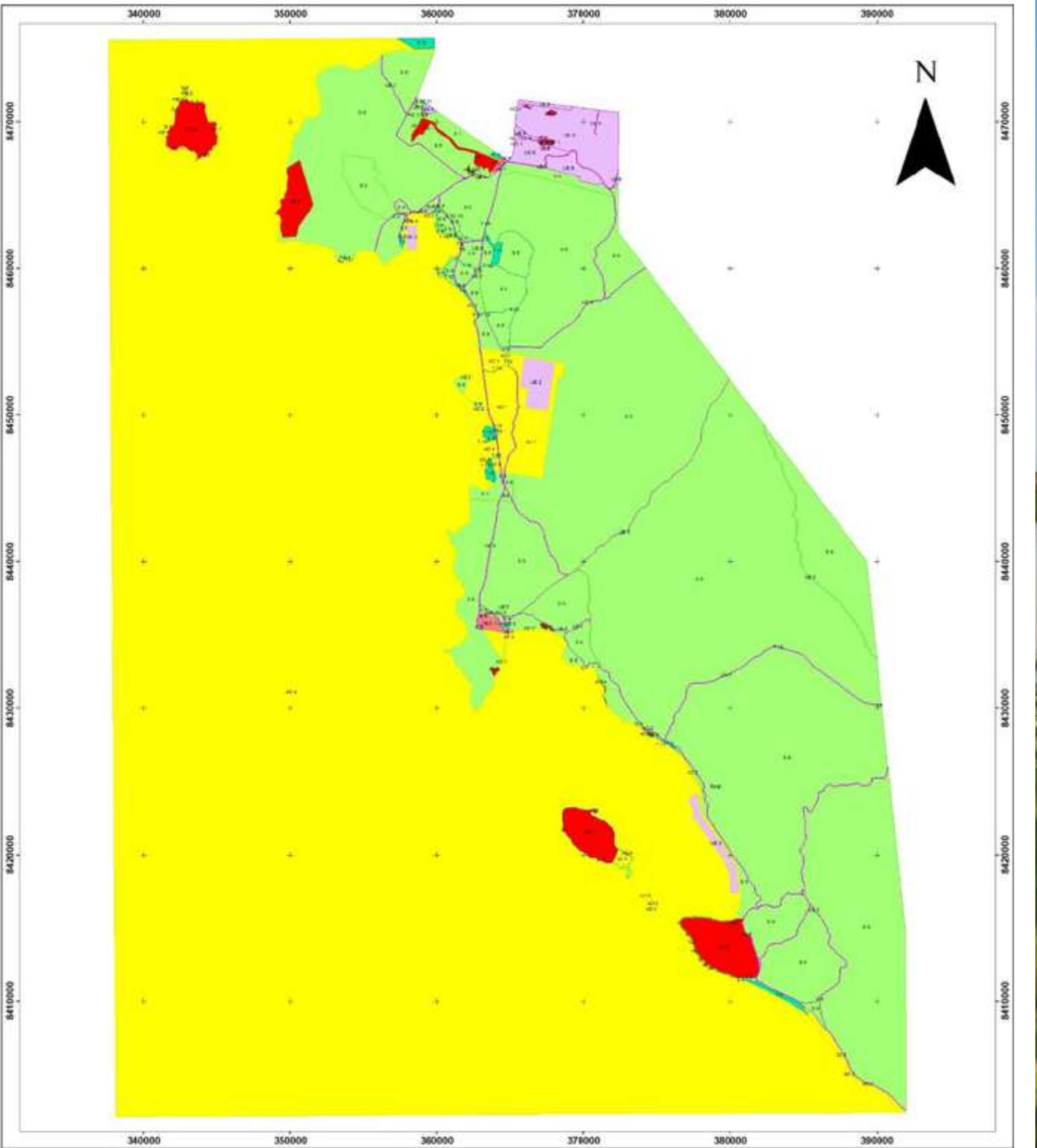


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ANNEX 5

MAP OF THE PARACAS NATIONAL RESERVE ZONING

Legend	Zone
	Historical-Cultural
	Wilderness
	Direct Use
	Strict Protection
	Recovery
	Special Use
	Tourism and Recreational Use Zone





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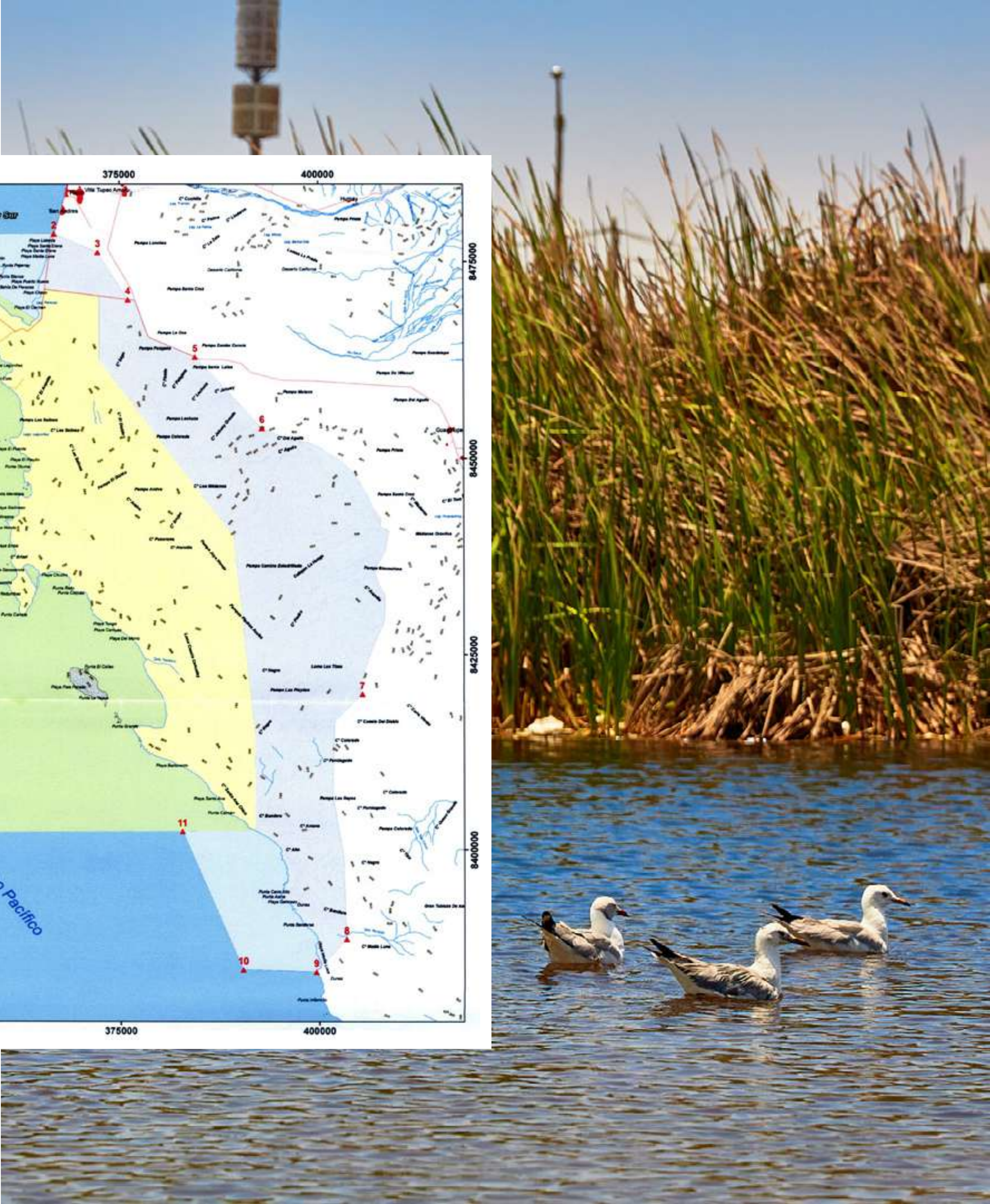
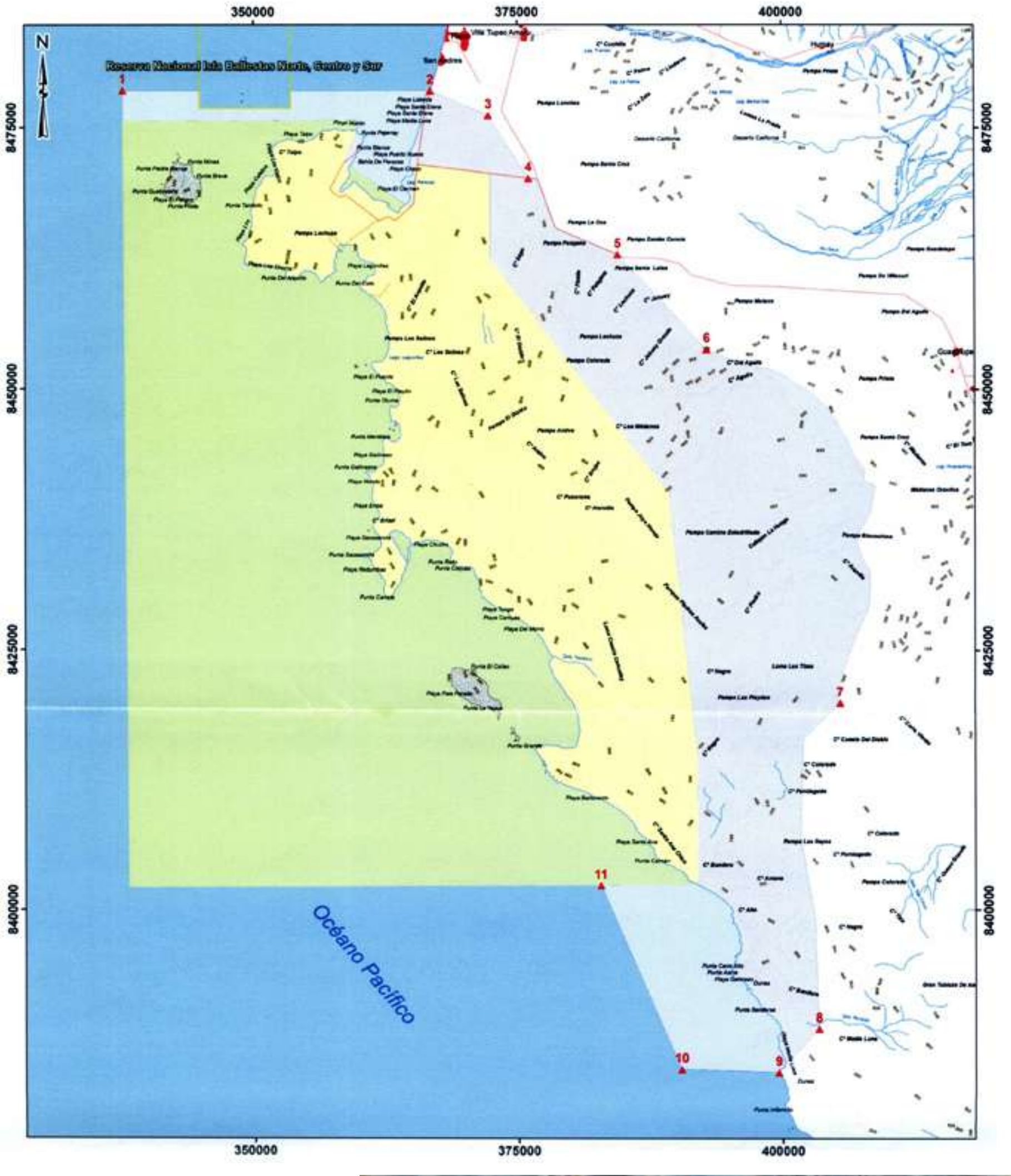
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ANNEX 6

MAP OF THE BUFFER ZONE OF THE PARACAS NATION RESERVE

POINT	EASTING	NORTHING
1	337612	8478555
2	366740	8478548
3	372242	8476185
4	376044	8470181
5	384451	8462868
6	392854	8453790
7	405455	8419926
8	403412	8388742
9	399607	8384614
10	390387	8384898
11	382758	8402390





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ANNEX 7

RISK IMPACT ASSESSMENT METHODOLOGIES

	LEAP PHASE / STEP	TECHNICAL DESCRIPTION (TNFD)	APPLICATION WITHIN THE ORGANI-ZATION (CAASA)	GIRO PHASE	DOCUMENTARY EVIDENCE (SU-PPORTING DOCUMENTATION)
L	L1: Scope of the business model and value chain	Identification of sector activities and locations of direct operations.	Process mapping within the Steel Complex and storage facilities.	Identify	Process Map / Steel Complex and Industrial and Reprocessable Materials Storage Yard Map
	L2: Identification of dependencies and impacts	Sectors with potentially moderate/high dependencies and impacts.	Selection of critical processes with biodiversity interaction.	Identify	Environmental Aspects and Impacts Matrix (ISO 14001).
	L3: Interface with nature	Location of operations and interaction with specific bio-mes and ecosystems.	Assessment of interaction with the local coastal desert ecosystem.	Identify	Environmental Management Ins-trument – Environmental Impact Assessment (EIA) / Biological Base-line.
	L4: Interface with sensitive sites	Identification of activities in ecologically sensitive sites.	Assessment of proximity to and in-teraction with the Paracas National Reserve buffer zone.	Identify	Paracas National Reserve Master Plan Zoning Scheme.



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RISK IMPACT ASSESSMENT METHODOLOGIES

	LEAP PHASE / STEP	TECHNICAL DESCRIPTION (TNFD)	APPLICATION WITHIN THE OR- GANIZATION (CAASA)	GIRO PHASE	DOCUMENTARY EVIDENCE (SU- PPORTING DOCUMENTATION)
E	E1: Identification of environmental assets, services, and drivers	Analysis of environmental assets, ecosystem services, and impact drivers.	Greenbelt (natural asset) and pollination services.	Assess	Flora and Fauna Inventory.
	E2: Identification of dependencies and impacts	Definition of specific dependencies and impacts on nature.	Identification of aquifer dependency and noise/ atmospheric impacts.	Assess	Water Footprint Report / Biological Monitoring Protocols.
	E3: Impact materiality as- sessment	Assessment of impact mag- nitude, scope, and severity.	Application of Leopold, CO- NESA, and GIRO methodo- logies to quantify biological significance.	Assess	Results Report: Leopold, CONESA, and GIRO Methodologies.



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RISK IMPACT ASSESSMENT METHODOLOGIES

	LEAP PHASE / STEP	TECHNICAL DESCRIPTION (TNFD)	APPLICATION WITHIN THE OR-GANIZATION (CAASA)	GIRO PHASE	DOCUMENTARY EVIDENCE (SU-PPORTING DOCUMENTATION)
A	A1: Identification of Risks and Opportunities	Determination of which impacts are material to the business.	Classification of biological findings as Biodiversity Risks (Environmental Risks).	Identify	GIRO Corporate Risk Matrix
	A2: Risk and Opportunity Mitigation Adjustment	Adaptation of the existing risk taxonomy and risk tolerance criteria.	Integration of the “Biodiversity” variable into the Risk Management Policy.	Control	Integrated Risk and Opportunity Management Policy, Environmental Impact Types, and Environmental Impact Type Matrix under the GIRO Methodology
	A3: Measurement and Prioritization of Risks and Opportunities	Determination of which risks and opportunities should be prioritized.	Application of the Impact × Probability Matrix (Low Criticality).	Assess	GIRO Risk Matrix – Biodiversity Module
	A4: Risk Materiality Assessment	Definition of material risks to be disclosed in accordance with TNFD.	Selection of strategic topics for the DJSI and the 2025 Report.	Assess	Sustainability Materiality Assessment, which identifies biodiversity as a non-material topic, although it remains subject to ongoing monitoring



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RISK IMPACT ASSESSMENT METHODOLOGIES

	LEAP PHASE / STEP	TECHNICAL DESCRIPTION (TNFD)	APPLICATION WITHIN THE ORGANIZATION (CAASA)	GIRO PHASE	DOCUMENTARY EVIDENCE (SUPPORTING DOCUMENTATION)
P	P1: Strategy and Resource Allocation Plans	Management decisions and resource allocation based on the analysis.	Budget allocation for the Biodiversity Conservation Plan.	Control	Annual Environmental Management Operating Plan.
	P2: Target Setting and Performance	Definition of metrics and measurement of progress.	Establishment of KPIs.	Monitor	Sustainability Indicators: Percentage of Compliance with the Environmental Conservation Program.
	P3: Reporting	Definition of disclosures in accordance with TNFD recommendations.	Preparation of the report "Our Commitment to Biodiversity 2025."	Monitor	Our Commitment to Biodiversity 2025 Report / Annual Report.
	P4: Presentation	Decision regarding where and how disclosures will be presented.	Publication on the corporate website and stakeholder communication channels.	Monitor	Publication of reports on the Corporate Website and Shareholders' Portal.



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ANNEX 8

RISK IMPACT ASSESSMENT CRITERIA – INTEGRATED RISK AND OPPORTUNITY MANAGEMENT METHODOLOGY

CRITERIA	LOW (L)	MODERATE (M)	CONSIDERABLE (C)	HIGH (H)
Financial (Operating Profit > S/ 50 MM) Applicable if the average Operating Profit for the last 3 years is greater than S/ 50 million.	Less than 0.25% of the average Operating Profit for the last 3 years. Less than S/ 1.25 MM	Between 0.25% and 0.5% of the average Operating Profit for the last 3 years. S/ 1.25 MM – S/ 2.5 MM	Between 0.5% and 1% of the average Operating Profit for the last 3 years. S/ 2.5 MM – S/ 5 MM	Greater than 1% of the average Operating Profit for the last 3 years. More than S/ 5 MM
Financial (Operating Profit < S/ 50 MM) Applicable if the average Operating Profit for the last 3 years is less than S/ 50 million.	Less than S/ 250 thousand.	Between S/ 250 thousand and S/ 500 thousand.	Between S/ 500 thousand and S/ 1 million.	More than S/ 1 million.
Impact on Operations and Information Systems (qualitative)	> Operational interruption of less than 1 hour. > No impact on the integrity and/or availability of information.	> Operational interruption between 1 and 8 hours. > Integrity and/or availability of critical information is affected.	> Operational interruption between 8 and 24 hours. > Loss of non-critical information belonging to CAASA or third parties that cannot be recovered.	> Operational interruption exceeding 24 hours. > Loss of critical information belonging to CAASA or third parties that cannot be recovered.
Impact on Reputation and Image (qualitative)	Minimal public awareness. Low or no perception of corporate responsibility impact.	Moderate public awareness. Liability may exist.	Significant media exposure. Perception of corporate responsibility impact.	Extensive public awareness and sustained media coverage. Political attention received. Perception of corporate responsibility impact.



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CRITERIA	LOW (L)	MODERATE (M)	CONSIDERABLE (C)	HIGH (H)
Regulatory and Legal Impact (Qualitative)	May result in non-compliance with internal, legal, industry-specific, labor, or tax regulations.	Results in non-compliance with internal, legal, industry-specific, labor, or tax regulations, but does not lead to penalties	> Non-compliance with legal, industry-specific, labor, or tax regulations resulting in the payment of penalties. > Ethical misconduct that violates internal regulations but does not constitute a criminal offense.	> Severe non-compliance with legal, industry-specific, labor, or tax regulations resulting in penalties and potentially leading to criminal sanctions against the entity or its representatives and/or intervention by the regulator. > Systematic ethical misconduct that violates internal regulations and/or constitutes a criminal offense.
Environmental Impact (Nature of the event/impact)	> The impact is limited to the activity level. > Impact on Company facilities and infrastructure located on paved surfaces.	> The impact affects the entire process. > Impact on one environmental factor (Air, Soil, Water, Flora, or Fauna).	> The impact extends to other processes. > Impact on two or more environmental factors (Air, Soil, Water, Flora, and Fauna).	> The impact extends beyond the Company's boundaries. > Impact on sensitive natural environments or populations (natural reserves, protected areas, etc.).
Occupational Health and Safety (Nature of the incident and harm)	> Very minor injuries that may cause discomfort or inconvenience	Very minor injuries that may cause discomfort or inconvenience	> Temporary disability. > Reversible health effects	> Permanent total or partial disability. > Irreversible injury or fatality.



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RISK PROBABILITY ASSESSMENT CRITERIA - INTEGRATED RISK AND OPPORTUNITY MANAGEMENT METHODOLOGY

CRITERIA	LOW (L)	MODERATE (M)	CONSIDERABLE (C)	HIGH (H)
Frequency	Has never occurred. Less than 0.5% of cases/ transactions.	The event has not occurred during the last year, but has occurred previously. Between 0.5% and 1% of cases/ transactions.	The event has occurred once during the last year. Between 1% and 5% of cases/ transactions.	The event has occurred more than once during the last year. Greater than 5% of cases/ transactions.
Exposure	Continuous exposure below 50% of the acceptable limit.	Continuous exposure between 50% and 75% of the acceptable limit.	Continuous exposure between 75% and 100% of the acceptable limit.	Continuous exposure above the acceptable limit.
Estimated Occurrence (Experience and Professional Judgment)	Low likelihood estimate.	Moderate likelihood estimate.	Considerable estimate. likelihood	High likelihood estimate.



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ANNEX 9

LOCATION OF THE FORMER SAN JUAN DE BUENAVISTA PROPERTY AND CAASA STEEL COMPLEX



ANNEX 10

LOCATION OF CAASA WITHIN THE BUFFER ZONE OF THE PARACAS NATIONAL RESERVE





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ANNEX 11

RISK IMPACT ASSESSMENT METHODOLOGIES

LEOPOLD METHODOLOGY →

RANGE	RATING
0 - 20	Not Significant
21 - 40	Slightly Significant
41 - 60	Moderately Significant
61 - 80	Significant
81 - 130	Highly Significant

GIRO METHODOLOGY →

RANGE	RATING
1	Low
2	Moderate
4	Considerable
8	High

CONESA METHODOLOGY →

IMPORTANCE INDEX		LEVEL OF IMPORTANCE
I < 25	Low or Minor Impact	Not Significant Impact
25 ≤ I < 50	Moderate Impact	
50 ≤ I < 75	High Impact	Significant Impact
75 ≥ I	Very High Impact	





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ANNEX 12

FLORA AND FAUNA IDENTIFIED IN EACH ENVIRONMENTAL MANAGEMENT INSTRUMENT (EMI)

ENVIRONMENTAL MANAGEMENT INSTRUMENT (EMI)	FLORA		FAUNA
2015–2016 Environmental Management Plan Update of the Environmental Adaptation and Management Program (PAMA)	Eucalyptus (<i>Eucalyptus globulus</i>) Acacia (<i>Acacia karroo</i> Hayne)		Turkey Vulture (<i>Cathartes aura</i>) Lesser Seedsnipe (<i>Thinocorus rumicivorus</i>) Long-tailed Mockingbird (<i>Mimus longicaudatus</i>) Paracas Gecko (<i>Phyllodactylus angustidigitus</i>) Peruvian Lizard (<i>Microlophus peruvianus</i>)
2018 Supporting Technical Report for the Steel Plant Modernization Project	Eucalyptus (<i>Eucalyptus globulus</i>) Acacia (<i>Acacia karroo</i> Hayne)		Turkey Vulture (<i>Cathartes aura</i>) Lesser Seedsnipe (<i>Thinocorus rumicivorus</i>) Long-tailed Mockingbird (<i>Mimus longicaudatus</i>) Turkey Vulture (<i>Cathartes aura</i>) Rufous-collared Sparrow (<i>Zonotrichia capensis</i>) Paracas Gecko (<i>Phyllodactylus angustidigitus</i>) Peruvian Lizard (<i>Microlophus peruvianus</i>)
2015–2016 Environmental Compliance Declaration (DAA) – Industrial and Reprocessable Materials Storage Yard	<i>Sesuvium portulacastrum</i> <i>Alternanthera halimifolia</i> <i>Baccharis salicifolia</i> <i>Heliotropium curassavicum</i> <i>Opuntia ficus-indica</i> <i>Casuarina equisetifolia</i>	<i>Salicornia fruticosa</i> <i>Cressa truxillensis</i> <i>Acacia macracantha</i> <i>Phoenix canariensis</i> <i>Distichlis spicata</i> <i>Phragmites australis</i>	Turkey Vulture (<i>Cathartes aura</i>) Long-tailed Mockingbird (<i>Mimus longicaudatus</i>) Rufous-collared Sparrow (<i>Zonotrichia capensis</i>) Paracas Gecko (<i>Phyllodactylus angustiditus</i>) Peruvian Lizard (<i>Microlophus peruvianus</i>)



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ANNEX 13

FLORA INVENTORY AT THE STEEL COMPLEX

The assessment of local flora is a fundamental component of sustainable green area management, as it supports the preservation of floristic diversity and contributes to the well-being of employees and visitors to the Aceros Arequipa Steel Complex.

Through the preparation of a flora inventory, the objective is to accurately identify the species present within the facility and determine the number of individuals per species. This information makes it possible to assess the condition of trees and shrubs, which play an important role as habitat for various bird and reptile species. Likewise, this analysis highlights the importance of biodiversity within the workplace environment, promoting a balanced relationship between industrial activities and environmental conservation.

METHODOLOGY

EField data collection for the flora inventory was carried out in 2024. To ensure proper organization of the information, the site was subdivided into eight components, including the Buenavista Property Greenbelt, the Steel Complex Greenbelt, and A Zones.

RESULTS



Greenbelt at the Buenavista Property

The property has approximately 4.4 km of greenbelt along its perimeter, consisting primarily of 5,505 eucalyptus trees, 2,664 huarango shrubs, and 89 casuarina trees.

Greenbelt at the Steel Complex

The Complex has approximately 6.3 km of greenbelt along its perimeter, consisting primarily of 6,749 trees of the species *Eucalyptus camaldulensis* (eucalyptus). These are distributed from the entrance gate to the truck area.

In addition, the greenbelt includes shrubs of the species *Vachellia farnesiana* (acacia), with an estimated total of 2,672 individuals, which are present throughout the entire perimeter.





Zone A
No new species were recorded other than those already identified in the perimeter greenbelt.

Zone C
This area includes the slag areas, air coolers, and the Domestic Wastewater Treatment Plant (DWTP). In the slag area, approximately 109 casuarina individuals (*Casuarina* sp.) and 197 eucalyptus individuals were recorded. In the area adjacent to the air coolers, only eucalyptus trees were observed, with approximately 278 individuals and no record of other species. In the DWTP area, approximately 13 acacia individuals (*Vachellia farnesiana*), 35 casuarina individuals (*Casuarina* sp.), and 106 casuarina shrubs approximately 1.30 m in height were identified, arranged as a shrub-type greenbelt.

Zone E
No new species were recorded other than those already identified in the perimeter greenbelt.



Zone B
In this zone, including the area adjacent to the camp, approximately 132 eucalyptus trees (*Eucalyptus camaldulensis*) were recorded. In the oxy-cutting area, approximately 203 trees of the same species were counted. Likewise, two sectors were identified in front of the oxy-cutting area. In the first sector, 134 eucalyptus trees (*Eucalyptus camaldulensis*) were recorded, while in the second sector 362 eucalyptus trees, 101 poinciana trees, 2 araucaria trees, 12 Brazilian pepper trees (*Schinus terebinthifolius*), 2 acacia shrubs (*Vachellia farnesiana*), and 3 Peruvian pepper trees (*Schinus molle*) were counted.

Zone D
This zone includes dining areas, offices, sectors adjacent to the central warehouse, and the orchard. In areas near the dining facilities, mainly fruit-bearing plants were identified, including 176 orange trees (*Citrus sinensis*), 1 acalypha (*Acalypha wilkesiana*), 1 croton (*Codiaeum variegatum*), 7 papaya trees (*Carica papaya*), 2 mango trees (*Mangifera indica*), 4 chinaberry trees (*Melia azedarach*), 6 fig trees (*Ficus carica*), and 1 lemon tree (*Citrus limon*). Additionally, in areas near these plantations, 13 poinciana trees were recorded, while 11 individuals of the same species were counted near the office area. Furthermore, various sectors within the zone contained 2 Mexican fan palms (*Washingtonia robusta*), 6 poinciana trees, 5 eucalyptus trees, 7 hibiscus plants, 8 Peruvian pepper trees, and 23 weeping fig trees (*Ficus benjamina*). Finally, 39 casuarina trees were recorded in the orchard area.

Zon F
In this zone, approximately 58 Peruvian pepper trees (*Schinus molle*) were counted, primarily located near the entrance gate. In addition, 4 individuals of *Hibiscus tiliaceus* and 1 individual of *Hibiscus rosa-sinensis* (China rose) were recorded at the gatehouse.





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	ORDER	FAMILY	SPECIES	COMMON NAME	STEEL COMPLEX GREENBELT	BUENAVISTA PROPERTY GREENBELT	ZONE A	ZONE B	ZONE C	ZONE D	ZONE E	ZONE F	TOTAL
1	Araucariales	Araucariaceae	Araucaria heterophylla	araucaria	-	-	-	2	-	-	-	-	2
2	Arecales	Arecaceae	Washingtonia robusta	Fan palm, Mexican fan palm	-	-	-	-	-	2	-	-	2
3	Brassicales	Caricaceae	Carica papaya	Papaya	-	-	-	-	-	7	-	-	7
4	Caryophyllales	Nyctaginaceae	Bougainvillea sp.	Bougainvillea, paperflower	73	-	-	-	-	-	-	-	73
5	Fabales	Fabaceae	Delonix regia	Poinciana	58	-	-	101	13	30	-	-	202
6	Fabales	Fabaceae	Vachellia farnesiana	Acacia	2,672	2,664	-	2	-	-	-	-	5,338
7	Fagales	Casuarinaceae	Casuarina	Casuarina, Australian pine	-	89	-	-	284	39	-	-	412
8	Lamiales	Oleaceae	Olea europaea	Olive tree				-	-	70	-	-	70
9	Malpighiales	Euphorbiaceae	Acalypha wilkesiana	Acalypha	-	-	-	-	-	1	-	-	1
10	Malpighiales	Euphorbiaceae	Codiaeum variegatum	Croton	-	-	-	-	-	1	-	-	1
11	Malpighiales	Euphorbiaceae	Manihot esculenta	Cassava	-	-	-	-	-	2	-	-	2
12	Malvales	Malvaceae	Hibiscus rosa-sinensis	China rose	-	-	-	-	-	-	-	1	1



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	ORDER	FAMILY	SPECIES	COMMON NAME	STEEL COMPLEX GREENBELT	BUENAVISTA PROPERTY GREENBELT	ZONE A	ZONE B	ZONE C	ZONE D	ZONE E	ZONE F	TOTAL
13	Malvales	Malvaceae	Hibiscus tiliaceus	Hibiscus	-	-	-	-	-	7	-	4	11
14	Myrtales	Lythraceae	Punica granatum	Pomegranate	-	-	-	-	-	20	-	-	20
15	Myrtales	Myrtaceae	Eucalyptus camaldulensis	Eucalyptus	6,749	5,505	-	831	475	5	-	-	13,565
16	Sapindales	Anacardiaceae	Mangifera indica	Mango	-	-	-	-	-	2	-	-	2
17	Sapindales	Anacardiaceae	Schinus molle	Peruvian pepper tree	-	-	-	3	-	8	-	58	69
18	Sapindales	Anacardiaceae	Schinus terebinthifolius	Brazilian pepper tree	-	-	-	12	-	-	-	-	12
19	Sapindales	Meliaceae	Melia azedarach	Chinaberry tree	-	-	-	-	-	4	-	-	4
20	Sapindales	Rutaceae	Citrus x limon	Lemon tree	-	-	-	-	-	1	-	-	1
21	Sapindales	Rutaceae	Citrus x sinensis	Orange tree	-	-	-	-	-	176	-	-	176
22	Urticales	Moraceae	Ficus benjamina	Weeping fig	-	-	-	-	-	23	-	-	23
23	Urticales	Moraceae	Ficus carica	Fig tree	-	-	-	-	-	6	-	-	6
24	Vitales	Vitaceae	Vitis vinifera	Grapevine	-	-	-	-	-	122	-	-	122

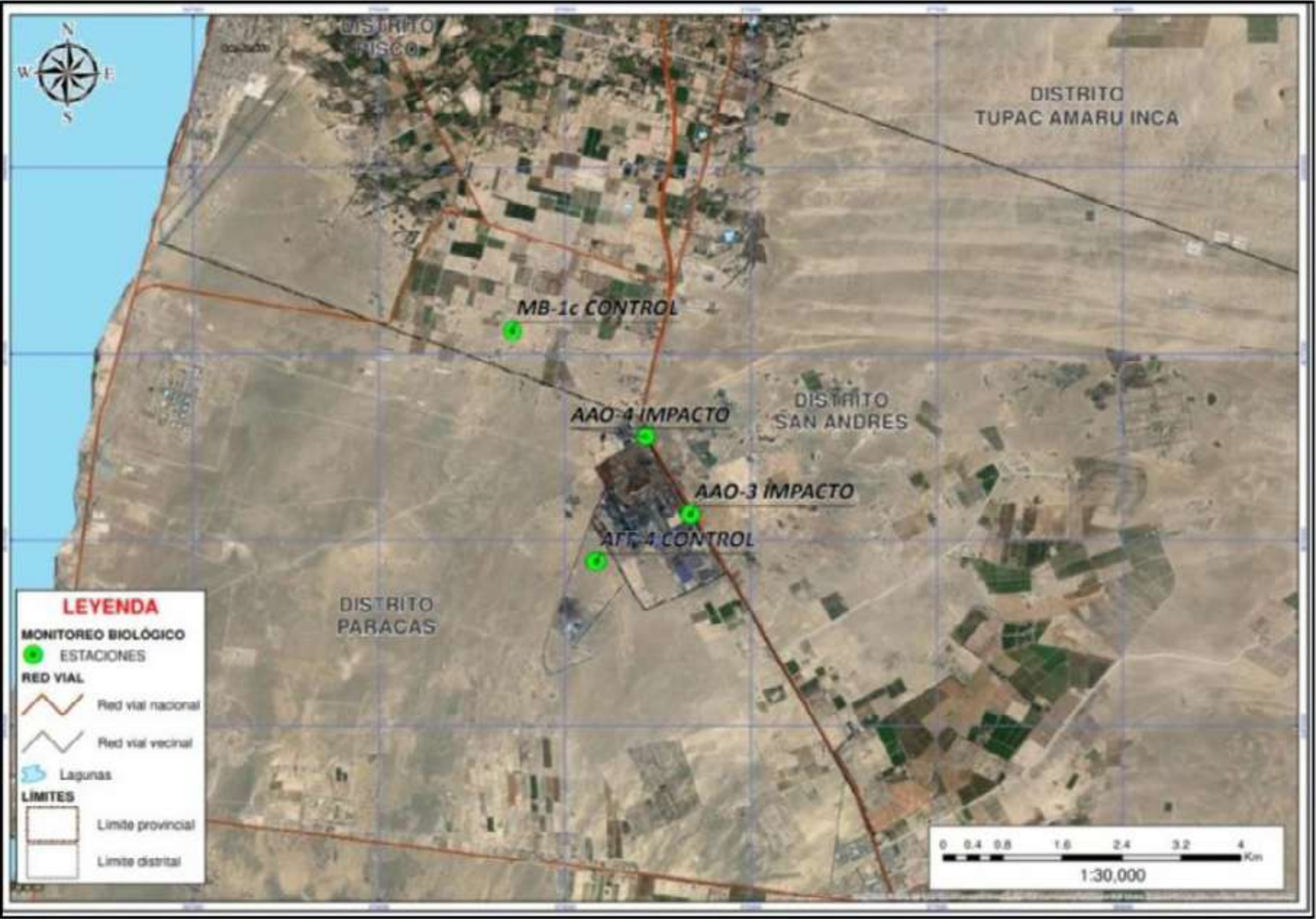
ANNEX 14

LOCATION OF SAMPLING STATIONS – BIOLOGICAL MONITORING



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CODE	DESCRIPTION	GEOGRAPHIC COORDINATES	
		NORTHING	EASTING
AAF-4 Control	Desert plains and slopes with sparse vegetation	8474712	372925
AAO-4 Impact	Desert plains and slopes with sparse vegetation	8476389	373596
AAO-3 Impact	Cultivated areas	8475342	374193
MB-1c Control	Cultivated areas	8477574	372882





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ANNEX 15

METHODOLOGIES APPLIED IN MONITORING

MONITORING REPORT PREPARED BY SGS ENVIRONMENTAL BIOLOGISTS (May and October)

CORPORACIÓN ACEROS AREQUIPA S.A.

MONITOREO DE FLORA Y FAUNA SILVESTRE EN EL ÁREA DE INFLUENCIA DE LAS INSTALACIONES DE LA PLANTA PISCO DE LA EMPRESA ACEROS AREQUIPA S.A.

2025 - I



NOMBRE Y FIRMA DEL PROFESIONAL AMBIENTAL

Nombre	Firma
Ines Lopez Medina Biólogo Consultor Ambiental en Biodiversidad	

Elaborado por:



SGS del Perú S.A.C
INDUSTRIES & ENVIRONMENTAL

MAYO 2025

CORPORACIÓN ACEROS AREQUIPA S.A.

MONITOREO DE FLORA Y FAUNA SILVESTRE EN EL ÁREA DE INFLUENCIA DE LAS INSTALACIONES DE LA PLANTA PISCO DE LA EMPRESA ACEROS AREQUIPA S.A.

2025 - II



NOMBRE Y FIRMA DEL PROFESIONAL AMBIENTAL

Nombre	Firma
Ines Lopez Medina Biólogo Consultor Ambiental en Biodiversidad	

Elaborado por:



SGS del Perú S.A.C
INDUSTRIES & ENVIRONMENTAL

OCTUBRE 2025

FLORA BIOLOGICAL MONITORING

QUALITATIVE ASSESSMENT – COLLECTION



QUANTITATIVE ASSESSMENT – TRANSECTS



FAUNA BIOLOGICAL MONITORING

AVIFAUNA – FIELD PROTOCOL



HERPETOFAUNA – SURVEY EFFORT





ANNEX 16

ALPHA AND BETA DIVERSITY INDICES

Alpha Diversity Indices

Alpha diversity refers to the number of species present within a habitat, as well as the abundance of each species. Its calculation provides an indicator of species dominance, and indices such as the following may be applied:

Shannon-Wiener Diversity Index: Considers the number of species and evenness, understood as the uniformity of the distribution of individuals among species. A greater number of species increases diversity, and greater evenness also contributes to higher diversity.

Pielou's Evenness Index (J): Measures the proportion of observed diversity in relation to the maximum expected diversity. Its values range from 0 to 1, where 1

corresponds to situations in which all species are equally abundant

Beta Diversity Indices

Beta diversity refers to the variation in the number of species among habitats within the same ecosystem and is assessed through the use of similarity and dissimilarity indices between samples.

These indices are calculated using qualitative data, indicating the presence or absence of species, or quantitative data, reflecting the relative abundance of each species.

Among the most commonly used indices are:

Jaccard Similarity Coefficient: Expresses the de-

gree to which two samples are similar based on the species present in them. Values range from 0, when no species are shared between sites, to 1, when both sites have the same species composition.

Morisita-Horn Index: Based on abundance and not influenced by sample size (Moreno, 2001; Ramírez, 2005; Wolda, 1981), although it is highly sensitive to the most abundant species. Values range from 0, when there is no similarity, to 1, when similarity exists.

This parameter makes it possible to compare diversity values between sites in order to classify areas according to their bioecological potential.





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ANNEX 17

BIOLOGICAL MONITORING





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FLORA →

PHOTO 1	
Easting	373596
Northing	8476389
Elevation	83 m.a.s.l.
Reference Location	AAO- 4
Scientific Name	<i>Cynodon dactylon</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	IUCN - LC (Least Concern)
Uses by the Local Po- pulation	-
Vegetation Forma- tion	Desert plains and slopes with sparse vegetation



PHOTO 2	
Easting	374327
Northing	8475246
Elevation	81 m.a.s.l.
Reference Location	AAO- 4
Scientific Name	<i>Bougainvillea glabra</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	IUCN - LC
Uses by the Local Po- pulation	-
Vegetation Forma- tion	Desert plains and slopes with sparse vegetation



PHOTO 3	
Easting	374205
Northing	8475312
Elevation	101 m.a.s.l.
Reference Location	AAO- 3
Scientific Name	<i>Chenopodium murale</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	IUCN - LC
Uses by the Local Po- pulation	-
Vegetation Forma- tion	Cultivated areas



PHOTO 4	
Easting	372925
Northing	8474712
Elevation	75 m.a.s.l.
Reference Location	AAF-04
Scientific Name	<i>Encelia canescens</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	-
Uses by the Local Po- pulation	-
Vegetation Forma- tion	Desert plains and slopes with sparse vegetation





PHOTO 5	
Easting	372925
Northing	8474712
Elevation	75 m.a.s.l.
Reference Location	AAF-4
Scientific Name	<i>Funastrum clausum</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	-
Uses by the Local Population	-
Vegetation Formation	Desert plains and slopes with sparse vegetation



PHOTO 6	
Easting	373134
Northing	8474588
Elevation	92 m.a.s.l.
Reference Location	AAF-4
Scientific Name	<i>Neltuma pallida</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	-
Uses by the Local Population	-
Vegetation Formation	Desert plains and slopes with sparse vegetation



PHOTO 7	
Easting	372925
Northing	8474712
Elevation	75 msnm
Reference Location	AAF-4
Scientific Name	<i>Eucalyptus globulus</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	IUCN - LC
Uses by the Local Population	-
Vegetation Formation	Desert plains and slopes with sparse vegetation



PHOTO 8	
Easting	373596
Northing	8476389
Elevation	81 m.a.s.l.
Reference Location	AAO-4
Scientific Name	<i>Poa annua</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	UICN - LC
Uses by the Local Population	-
Vegetation Formation	Desert plains and slopes with sparse vegetation





PHOTO 9	
Easting	373601
Northing	8476334
Elevation	79 m.a.s.l.
Reference Location	AAO-4
Nombre Científico	<i>Heliotropium curassavicum</i>
D. S. 043 - 2006 - AG	-
Conservación Internacional	IUCN – LC
Uses by the Local Po- pulation	-
Vegetation Forma- tion	Desert plains and slopes with sparse vegetation



PHOTO 10	
Easting	372925
Northing	8474712
Elevation	75 m.a.s.l.
Reference Location	AAF-4
Scientific Name	<i>Distichlis spicata</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	IUCN – LC
Uses by the Local Po- pulation	-
Vegetation Forma- tion	Desert plains and slopes with sparse vegetation



PHOTO 11	
Easting	372925
Northing	8474712
Elevation	75 m.a.s.l.
Reference Location	AAF-4
Scientific Name	<i>Phoenix canariensis</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	IUCN – LC
Uses by the Local Po- pulation	-
Vegetation Forma- tion	Desert plains and slopes with sparse vegetation



PHOTO 12	
Easting	372579
Northing	8477559
Elevation	75 m.a.s.l.
Reference Location	MB-1C
Scientific Name	<i>Pluchea chingoyo</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	-
Uses by the Local Po- pulation	-
Vegetation Forma- tion	Cultivated areas





PHOTO 13	
Easting	373596
Northing	8476389
Elevation	87 m.a.s.l.
Reference Location	AAO-4
Scientific Name	<i>Sonchus oleraceus</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	-
Uses by the Local Population	-
Vegetation Formation	Desert plains and slopes with sparse vegetation



PHOTO 14	
Easting	373684
Northing	8476226
Elevation	92 m.a.s.l.
Reference Location	AAO-4
Scientific Name	<i>Setaria verticillata</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	-
Uses by the Local Population	-
Vegetation Formation	Desert plains and slopes with sparse vegetation



PHOTO 15	
Easting	373532
Northing	8476329
Elevation	81 m.a.s.l.
Reference Location	AAO-4
Scientific Name	<i>Sesuvium portulacastrum</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	UICN- LC
Uses by the Local Population	-
Vegetation Formation	Desert plains and slopes with sparse vegetation



PHOTO 16	
Easting	372882
Northing	8477574
Elevation	71 m.a.s.l.
Reference Location	MB-1C
Scientific Name	<i>Parkinsonia praecox</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	-
Uses by the Local Population	-
Vegetation Formation	Desert plains and slopes with sparse vegetation





PHOTO 17	
Easting	373596
Northing	8476389
Elevation	81 m.a.s.l.
Reference Location	AAO-4
Scientific Name	<i>Solanum nigrum</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	-
Uses by the Local Population	-
Vegetation Formation	Desert plains and slopes with sparse vegetation



PHOTO 19	
Easting	373596
Northing	8476389
Elevation	81 m.a.s.l.
Reference Location	AAO-4
Scientific Name	<i>Schinus terebinthifolia</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	-
Uses by the Local Population	-
Vegetation Formation	Desert plains and slopes with sparse vegetation



PHOTO 18	
Easting	373134
Northing	8474588
Elevation	92 m.a.s.l.
Reference Location	AAF-4
Scientific Name	<i>Tamarix aphylla</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	UICN - LC
Uses by the Local Population	-
Vegetation Formation	Desert plains and slopes with sparse vegetation



PHOTO 20	
Easting	373596
Northing	8476389
Elevation	81 m.a.s.l.
Reference Location	AAO-4
Scientific Name	<i>Trianthema portulacastrum</i>
D. S. 043 - 2006 - AG	-
International Conservation Status	-
Uses by the Local Population	-
Vegetation Formation	Desert plains and slopes with sparse vegetation





PHOTO 21		
Easting	372851	
Northing	8474545	
Elevation	74 m.a.s.l.	
Reference Location	AAF-4	
Scientific Name	<i>Vachellia karroo</i>	
D. S. 043 - 2006 - AG	-	
International Conservation Status	IUCN - LC	
Uses by the Local Population	-	
Vegetation Formation	Desert plains and slopes with sparse vegetation	

PHOTO 22		
Easting	372851	
Northing	8474545	
Elevation	74 m.a.s.l.	
Reference Location	AAF-4	
Scientific Name	<i>Vachellia macracantha</i>	
D. S. 043 - 2006 - AG	-	
International Conservation Status	IUCN - LC	
Uses by the Local Population	-	
Vegetation Formation	Desert plains and slopes with sparse vegetation	

PHOTO 23		
Easting	373596	
Northing	8476389	
Elevation	81 m.a.s.l.	
Reference Location	AAF-4	
Scientific Name	<i>Solanum sp.</i>	
D. S. 043 - 2006 - AG	-	
International Conservation Status	IUCN - LC	
Uses by the Local Population	-	
Vegetation Formation	Desert plains and slopes with sparse vegetation	

PHOTO 24		
Easting	374193	
Northing	8475342	
Elevation	84 m.a.s.l.	
Reference Location	AAO-3	
Scientific Name	<i>Solanum pimpinellifolium</i>	
D. S. 043 - 2006 - AG	-	
International Conservation Status	IUCN - LC	
Uses by the Local Population	-	
Vegetation Formation	Desert plains and slopes with sparse vegetation	



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FAUNA →

PHOTO 25	
Easting	374029
Northing	8475501
Elevation	77 m.a.s.l.
Vegetation Unit	Cultivated areas
Monitoring Station	AAO-3 – PC.1
Scientific Name	<i>Zenaida meloda</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	From southern Ecuador to western Argentina, including Peru and central Chile.



PHOTO 26	
Easting	373543
Northing	8476341
Elevation	57 m.a.s.l.
Vegetation Unit	Desert plains and slopes with sparse vegetation
Monitoring Station	AAO-4 – PC.1
Scientific Name	<i>Columbina cruziana</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Found west of the Andes in Ecuador, Peru, and northern Chile.





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PHOTO 27	
Easting	373088
Northing	8474646
Elevation	65 m.a.s.l.
Vegetation Unit	Desert plains and slopes with sparse vegetation
Monitoring Station	AAF-4
Scientific Name	<i>Conirostrum cinereum</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Uncommon and widely distributed in coastal lowlands, the western slope of the Andes, and inter-Andean valleys from sea level up to 4,200 m.



PHOTO 28	
Easting	373125
Northing	8474236
Elevation	65 m.a.s.l.
Vegetation Unit	Desert plains and slopes with sparse vegetation
Monitoring Station	AAF-4 – PC.6
Scientific Name	<i>Mimus longicaudatus</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Common in open and relatively dry habitats and also found in urban areas and parks.





PHOTO 29	
Easting	373543
Northing	8476341
Elevation	57 m.a.s.l.
Vegetation Unit	Desert plains and slopes with sparse vegetation
Monitoring Station	AAO-4 – PC.1
Scientific Name	<i>Passer domesticus</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Common in cities and other human-populated areas. Primarily distributed along the coast of Peru.



PHOTO 30	
Easting	374029
Northing	8475501
Elevation	77 m.a.s.l.
Vegetation Unit	Cultivated areas
Monitoring Station	AAO-3 – PC.1
Scientific Name	<i>Zonotrichia capensis</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Common and widely distributed in the coastal region, throughout the Andes at nearly all elevations, in inter-Andean valleys, and in parts of the eastern slope of the Andes. It is generally found at higher elevations along the eastern Andean slope.





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PHOTO 31	
Easting	372863
Northing	8477724
Elevation	53 m.a.s.l.
Vegetation Unit	Cultivated areas
Monitoring Station	MB-1c – PC.1
Scientific Name	<i>Falco sparverius</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC CITES – Appendix II
Geographical Distribution	Common along the coast and Andean slopes.



PHOTO 32	
Easting	373268
Northing	8476176
Elevation	57 m.a.s.l.
Vegetation Unit	Desert plains and slopes with cultivated areas
Monitoring Station	AAO-4 – MB1C
Scientific Name	<i>Amazilis amazilia</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC CITES – Appendix II
Geographical Distribution	Common in coastal scrublands and along the edges of riparian forests west of the Andes, from sea level up to 2,400 m elevation.





PHOTO 33	
Easting	373502
Northing	8475980
Elevation	57 m.a.s.l.
Vegetation Unit	Desert plains and slopes with sparse vegetation
Monitoring Station	AAO-4 – PC.6
Scientific Name	<i>Zenaida auriculata</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Common to fairly common in the western coastal lowlands and inter-Andean valleys at elevations ranging from sea level to 4,000 m.



PHOTO 34	
Easting	373125
Northing	8474236
Elevation	65 m.a.s.l.
Vegetation Unit	Desert plains and slopes
Monitoring Station	AAF-4
Scientific Name	<i>Thaumastura cora</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC CITES – Appendix II
Geographical Distribution	The Oasis Hummingbird is common across a broad altitudinal range, from near sea level up to 2,800 m on the western slope of the Andes. It undertakes seasonal migrations.





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PHOTO 35	
Easting	373282
Northing	8474436
Elevation	65 m.a.s.l.
Vegetation Unit	Desert plains and slopes with sparse vegetation
Monitoring Station	AAF-4 – PC.7
Scientific Name	<i>Pygochelidon cyanoleuca</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Common in urban areas and open habitats from sea level up to 4,200 m on both slopes of the Andes.



PHOTO 36	
Easting	373125
Northing	8474236
Elevation	65 m.a.s.l.
Vegetation Unit	Desert plains and slopes
Monitoring Station	AAF-4
Scientific Name	<i>Myrtis fanny</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Coastal areas and inter-Andean valleys, particularly in arid and semi-arid zones.





PHOTO 37	
Easting	373297
Northing	8474409
Elevation	70 m.a.s.l.
Vegetation Unit	Desert plains and slopes
Monitoring Station	AAF-4
Scientific Name	<i>Charadrius vociferus</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Present mainly along the northern and central coast of Peru.



PHOTO 38	
Easting	372930
Northing	8477579
Elevation	57 m.a.s.l.
Vegetation Unit	Cultivated areas
Monitoring Station	MB-1c – VES3
Scientific Name	<i>Crotophaga sulcirostris</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Along the coast, from Piura to northern Arequipa.





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PHOTO 39	
Easting	372483
Northing	8477511
Elevation	60 m.a.s.l.
Vegetation Unit	Plains and slopes with cultivated areas
Monitoring Station	MB-1C
Scientific Name	<i>Cathartes aura</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Widely distributed from the coast to the Amazon, including the lower Andes.



PHOTO 40	
Easting	373046
Northing	8474439
Elevation	70 m.a.s.l.
Vegetation Unit	Desert plains and slopes
Monitoring Station	AAF-4
Scientific Name	<i>Troglodytes musculus</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Present in the coast, highlands, and lowland rainforest.





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PHOTO 41	
Easting	372930
Northing	8477579
Elevation	57 m.a.s.l.
Vegetation Unit	Cultivated areas
Monitoring Station	MB-1c
Scientific Name	<i>Molothrus bonariensis</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Along the coast, from Piura to northern Arequipa



PHOTO 42	
Easting	372930
Northing	8477579
Elevation	57 m.a.s.l.
Vegetation Unit	Desert plains and slopes
Monitoring Station	MB-1c
Scientific Name	<i>Geositta peruviana</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Along the coast, from Piura to northern Arequipa.





PHOTO 43	
Easting	373233
Northing	8474338
Elevation	72 m.a.s.l.
Vegetation Unit	Desert plains and slopes
Monitoring Station	AAF-4
Scientific Name	<i>Aeronautes andecolus</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Distributed throughout the Andes mountain range in South America.



PHOTO 44	
Easting	372926
Northing	8474603
Elevation	65 m.a.s.l.
Vegetation Unit	Desert plains and slopes with sparse vegetation
Monitoring Station	AAF-4 – VES2
Scientific Name	<i>Microlophus theresiae</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Coastal desert, from Lima to Arequipa.





PHOTO 45	
Easting	372926
Northing	8474603
Elevation	65 m.a.s.l.
Vegetation Unit	Desert plains and slopes with sparse vegetation
Monitoring Station	AAF-4 – VES2
Scientific Name	<i>Phyllodactylus gerrhopygus</i> (Adulto macho)
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Central Peru (from the Lima Region to Tacna) to northern Chile.



PHOTO 46	
Easting	372930
Northing	8477579
Elevation	57 m.a.s.l.
Vegetation Unit	Cultivated areas
Monitoring Station	MB-1c – VES3
Scientific Name	<i>Microlophus thoracicus</i> (juvenil)
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Along the coast, from Piura to northern Arequipa.





PHOTO 47	
Easting	372930
Northing	8477579
Elevation	57 m.a.s.l.
Vegetation Unit	Desert plains and slopes
Monitoring Station	MB-1c
Scientific Name	<i>Dicrodon heterolepis</i>
D.S. 004-2014-MINAGRI	-
International Conservation Status	IUCN – LC
Geographical Distribution	Along the coast, from Piura to northern Arequipa.





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ANNEX 18

SAMPLING STATIONS – 2025 BIOLOGICAL MONITORING

MONITORING STATION: AAF-4		
Vegetation Unit	Desert plains and slopes with sparse vegetation	
Northing	8474712	
Easting	372925	
Elevation	66 m.a.s.l.	
Evaluation Period	First Half and Second Half	
Assessment Description	Area with total land-use change due to the construction of the Aceros Arequipa plant.	
RESULTS		
Number of Species	First Half	Second Half
Flora	1	0
Birds	7	7
Herpetofauna	1	1





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MONITORING STATION: AAO-4		
Vegetation Unit	Desert plains and slopes with sparse vegetation	
Northing	8476389	
Easting	373596	
Elevation	-	
Evaluation Period	First Half and Second Half	
Assessment Description	-	
RESULTS		
Number of Species	First Half	Second Half
Flora	2	1
Birds	12	12
Herpetofauna	0	1





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MONITORING STATION: AAO-3		
Vegetation Unit	Desert plains and slopes with sparse vegetation	
Northing	8475342	
Easting	374193	
Elevation	77 m.a.s.l.	
Evaluation Period	First Half and Second Half	
Assessment Description	Area with total land-use change due to the construction of the Aceros Arequipa plant.	
RESULTS		
Number of Species	First Half	Second Half
Flora	3	2
Birds	3	3
Herpetofauna	0	1





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MONITORING STATION: MB-1c		
Vegetation Unit	Desert plains and slopes with sparse vegetation	
Northing	8477574	
Easting	372882	
Elevation	64 m.a.s.l.	
Evaluation Period	First Half and Second Half	
Assessment Description	Area with land-use change for monocultures of olive, maize, tomato, and other crops.	
RESULTS		
Number of Species	First Half	Second Half
Flora	0	0
Birds	5	5
Herpetofauna	3	2





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REFERENCES

BUCKLAND, S.T.

1987 - “On the variable circular plot method of estimating density”. Biometrika. Volumen 43, pp. 363-384.

BIBBY, Colin, N.D. BURGERS & D.A. HILL

2000- Bird Census Techniques. Segunda edicion. Ecoscope. pp. 302

CITES.

2019 - “Convention on International Trade in Endangered Species of Wild Fauna and Flora”. The CITES Appendices. <https://cites.org/sites/default/files/esp/app/2024/S-Appendices-2024-05-25.pdf>

CLEMENTS, James & Naom SHANY

2001- A field guide to the birds of Peru. California: Ibis Publishing Company.

CMS

2018 - Appendices I and II of the Convention on the Conservation of Migratory Species of Wild Animals (CMS). https://www.cms.int/sites/default/files/uploads/revi-sed-appendices_cop14_s.pdf

Córdova, J.; Torres, C.; Suarez, J. & Williams, J.

2009 - Amphibians and Reptiles. In: W. Soave, G. Mange, V. Ferreti & C. Galliari (Eds.), Biological Diversity in the Peruvian Amazon (1st ed.) (pp. 166-195). La Plata, Argentina: Camisea Biodiversity Monitoring Program.

CORPORACIÓN ACEROS AREQUIPA S.A

- > 2015- Update of the Environmental Management Plan (PMA) of the Environmental Adaptation and Management Program (PAMA) for CAASA Facility No. 02.
- > 2016 - Environmental Compliance Declaration (DAA) for the Industrial and Reproces-sable Materials Storage Yard Project.
- > 2018 - Supporting Technical Report for the Steel Plant Modernization Project at Fa-cility No. 02.
- > 2025 - Biological Monitoring Report for the First and Second Semesters of 2025 (Pre-pared by SGS del Perú).
- > 2025 - Corporate Environmental Policy, CORPORATE ENVIRONMENTAL POLICY V4.
- > 2023 - Corporate Internal Control and Integrated Risk Management Policy. URL: https://acerosarequipa.com/sites/default/files/sostenibilidad/descargas/2026-04/POL%C3%8DTICA%20CORPORATIVA%20DE%20CONTROL%20INTERNO%20Y%20GESTI%C3%93N%20INTEGRAL%20DE%20RIESGOS_0.pdf
- > 2024- Integrated Annual Report 2025. URL: investors.acerosarequipa.com/memoria-integrada-2025/assets/documentos/es/Aceros_Arequipa_Memoria_Integra-da_2025.pdf

CRUMP, Martha y David SCOTT.

1994- Visual encounter survey. En HEYER Ronald y otros (Editores). Measuring and Monitoring Biological Diversity. Smithsonian Institution.

MATTEUCCI, Silvia & Aida COLMA,

1982 - Methodology for Vegetation Studies. General Secretariat of the Organization of American States and Regional Program for Scientific and Technological Development. Washington, D.C., United States of America. 159 p.



MINISTRY OF THE ENVIRONMENT – MINAM

2015 – Guide for Flora and Vegetation Inventory. Lima: Ministry of the Environment. General Directorate for the Evaluation, Valuation and Financing of Natural Heritage. Ministerial Resolution No. 059-2015-MINAM. 50 pp.

2025 – Paracas National Reserve Master Plan 2025–2030. URL: <https://cdn.www.gob.pe/uploads/document/file/9233322/7577103-21-plan-maestro-rnp-2025-2030-f-f-1-f-f.pdf?v=1767216470>

MORENO, Claudia

2001 – Methods for Measuring Biodiversity. Vol. 1. Ibero-American Program of Science and Technology for Development, UNESCO Regional Office for Science and Technology for Latin America and the Caribbean, and the Aragonese Entomological Society. SEA Manuals and Thesis Series. 84 pp.

REYNOLDS, Richard & SCOTT, J. & NUSSBAUM, Ronald.

1980 – “A Variable Circular-Plot Method for Estimating Bird Numbers”. Condor. Volumen 82, pp. 309–313.

RAMIREZ, Alberto

2006 – Ecology: Methods and Analysis of Populations and Communities. Bogotá, Colombia: Pontificia Universidad Javeriana Press.

REMSEN, J. y otros

2011. A classification of the bird species of South America. American Ornithologists' Union. <http://www.museum.lsu.edu/~Remsen/SACCBaseline.htm>

SCHULENBERG, Thomás et al.

2010. Birds of Peru. 2nd Edition. New Jersey: Princeton University Press.

INTERNATIONAL UNION FOR CONSERVATION OF NATURE (IUCN)

2020-1 – The IUCN Red List of Threatened Species of Wild Flora and Fauna. <https://www.iucnredlist.org/>

WOLDA, Henk

1981 – “Similarity Indices, Sample Size and Diversity”. Oecologia. Vol. 50, pp. 296–302.

WORLD ECONOMIC FORUM

2026 – Global Risks Report 2026 <https://www.weforum.org/publications/global-risks-report-2026/>

SUPREME LAWS AND DECREES

- > Decree No. 002-2021-MPP (2021), Establishment of the Local Management Committee for the Integrated Management of the Pisco–Paracas Marine–Coastal Zone. URL: <https://drive.google.com/file/d/1WfkycxKA8XXIkYulkDT3N1NEYUyoYFhh/view>
- > Supreme Decree No. 004-2014-MINAGRI (2014), Supreme Decree Approving the Updated Classification and Categorization List of Legally Protected Threatened Wildlife Species. URL: <https://www.minagri.gob.pe/portal/decreto-supremo/ds-2014/10837-decreto-supremo-n-004-2014-minagri>
- > Law No. 26834 (1997), Protected Natural Areas Act. URL: <https://sinia.minam.gob.pe/normas/ley-areas-naturales-protegidas>
- > Law No. 28611 (2005), General Environmental Act. URL: <https://leyes.congreso.gob.pe/Documentos/Leyes/28611.pdf>
- > Ordinance No. 002-2016-MPP (2016), Update and Reactivation of the Municipal Environmental Commission of Pisco. URL: http://www.munipisco.gob.pe/files/archivos/ordenanzas/2016/ORDENANZA_N_002-2016-MPP.pdf
- > Ordinance No. 018-2020-MPP (2020) Ordinance Declaring the Development and Implementation of the Integrated Management Plan for the Marine–Coastal Zone within the Province of Pisco to be of Provincial Interest. URL: <https://drive.google.com/file/d/1-FaptM92IOzUosfHWWhlf6n8LEgBspPU4/view>



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- > Ordinance No. 014-2021-MPP (2021) Municipal Ordinance Approving the Integrated Management Plan for the Marine-Coastal Zone of the Province of Pisco, 2021-2026. URL: <https://cdn.www.gob.pe/uploads/document/file/2678114/ORDENANZA%20N%C2%BA%20014-2021.pdf.pdf>
- > Resolution No. 458-2019-MPP-ALC (2019) Approval of the Internal Regulations of the Provincial Municipal Environmental Commission of Pisco. URL: <https://drive.google.com/file/d/1uHWMeymKQ7kdUDE0KVjcwG5bQT0h7ApX/view>
- > Resolution No. 459-2019-MPP-ALC (2019) Establishment of the Wetlands and Riparian Zone Technical Working Group. URL: <https://drive.google.com/file/d/1E-FxmDWPhR3hQym6XkoqHaPAm7u3D2X0a/view>
- > Directorial Resolution No. 015-2017-PRODUCE/DVMYPE-I/DIGGAM (2017) Approval of the Environmental Compliance Declaration (DAA) for the Industrial and Reprocessable Materials Storage Yard Project at CAASA Facility No. 02.
- > Directorial Resolution No. 262-2018-PRODUCE/DVMYPE-I/DGAAMI (2018) Approval of the Supporting Technical Report (ITS) for the Steel Plant Modernization Project at CAASA Facility No. 02.
- > Directorial Resolution No. 308-2016-PRODUCE/DVMYPE-I/DIGGAM (2016) Approval of the Update to the Environmental Management Plan (PMA) of the Environmental Adaptation and Management Program (PAMA) for CAASA Facility No. 02.
- > Executive Presidency Resolution No. 000173-2025-PE (2025) URL: <https://cdn.www.gob.pe/uploads/document/file/9233321/7577103-resolucion-de-presidencia-ejecutiva-000173-2025-pe.pdf?v=1767216469>



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