

#### 01 Introduction

Investment and finance professionals are increasingly called on to evaluate the nature-related risks and opportunities embedded in specific assets, projects, and landscapes. This isn't just about doing good, it's about making informed, risk-adjusted decisions. Assessing the potential of a site to contribute meaningfully to biodiversity outcomes can be complex. Some areas, even if severely degraded, may offer limited ecological return on investment, providing minimal gains in species richness or ecosystem function despite costly interventions. In contrast, other locations may offer outsized impact relative to effort, especially when tied to critical habitat corridors or keystone ecosystems. For financial actors, understanding this variation is key to directing capital toward interventions that deliver measurable ecological and long-term economic value.

#### 02 What Do I Need?

With the NatureAlpha Geoverse, investors and lenders can easily evaluate sites using a combination of precise location data and comprehensive geospatial analysis. Users simply upload:

- An asset identifier,
- Latitude and longitude coordinates, and
- A chosen buffer radius.

Through the Private Asset Portfolio Upload feature, the platform then cross-references each site against 18 distinct geospatial layers. These layers include metrics that help quantify the benefits of risk mitigation or restoration. Key examples include:

- Species Threat Abatement (START): A prioritisation metric identifying sites where reducing threats would have the largest positive impact on IUCN Red List species. It calculates the proportion of each species' known habitat within the buffer radius, weighted by the species' threat level. The metric was created and is administered by the Integrated Biodiversity Assessment Tool (IBAT)
- Marine Species Threat Abatement: Uses the same method as START but covers 1,646 threatened marine species.



- Critical Areas for Nature's Contributions to People (NCP) and Biodiversity: Quantifies sites that
  provide the greatest benefits to people through ecosystem services (NCPs), based on nine regional and
  one global category. High scores indicate locations with a dense concentration of these benefits.
- Areas of Importance for Biodiversity and Climate: This optimised dataset identifies areas where
  conservation or restoration would simultaneously reduce threatened species loss, maximise carbon
  retention, and improve water quality.

# 03 Financial Materiality of Exposure

In addition to ecological and social benefits, it is essential to consider the financial materiality of these exposures. Operating in areas with a high provision of NCPs carries both opportunities and risks. For instance, if ecosystems that provide critical NCPs (such as flood protection, water filtration, or pollination) are degraded through overuse or poor management, their loss can directly affect the financial performance of nearby operations. This could manifest as increased operational costs, reduced productivity, or heightened exposure to physical climate risks.

Conversely, protecting and enhancing NCPs can generate direct financial benefits. Restoring and safeguarding natural systems can enhance the operational efficiency of nearby assets, reduce long-term costs, and strengthen resilience. Wetlands, for example, not only reduce flood risks but also lower infrastructure maintenance costs. Similarly, restoring forests that support pollination can safeguard agricultural yields, securing revenue streams. By actively mitigating threats or restoring areas where these ecosystem services will be felt most keenly, investors and lenders stand to gain more than performing the same actions in less material locations

Beyond operational gains, there are also reputational benefits for investors and companies who lead in ecosystem restoration. Demonstrating positive impact in areas that provide greater biodiversity and community benefits strengthens stakeholder trust, attracts sustainable capital, and improves brand equity. Together, these factors ensure that financial returns are inherently tied to the preservation and restoration of NCPs.



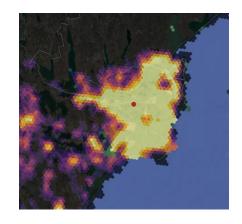
## 04 What Does This Look Like In Practice?

To illustrate, let's examine five real-world natural capital restoration projects.

Project Name	Species Threat Abatement	Species Threat Abatement Marine	Areas of Importance for Biodiversity and Climate	Critical Areas for Biodiversity and NCP
Danube Delta Rewilding	1.000	0.173	0.727	0.723
Greater Côa Valley Rewilding	0.707	0.000	0.668	0.282
Eden Reforestation, Nepal	1.000	0.000	0.724	0.782
Haizhu Wetland Park	1.000	0.363	0.705	0.523
Cornwall LINC	0.004	0.056	0.476	0.349

#### **Species Threat Abatement**

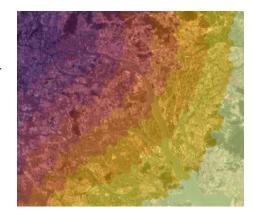
Three sites score the maximum value of 1.0, meaning that within a 50 km buffer, there is a substantial proportion of the total population for several Red List species. This makes them highly valuable for reducing global extinction risk. In contrast, Cornwall LINC scores only 0.004, reflecting minimal presence of threatened species and therefore lower biodiversity gains from intervention.



#### Marine Species Threat Abatement

Scores are generally low, with Haizhu Wetland Park standing out (0.363) due to its influence on the Pearl River Delta, one of the world's most polluted waterways.

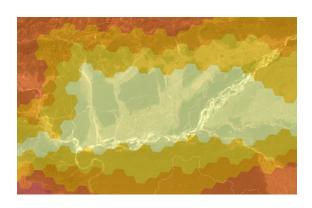
Although inland, the park's ecosystem services, such as water and sediment regulation, indirectly benefit marine biodiversity





# Biodiversity and Climate Importance

Haizhu Wetland Park, Danube Delta Rewilding, and Eden Reforestation score highly here, each contributing significantly to biodiversity, carbon retention, and water quality. The Eden Reforestation site (0.727) is in a priority zone where reforestation would yield disproportionate gains across all three factors.



#### Biodiversity and NCP Importance

While broadly aligned with the Biodiversity and Climate results, this layer also captures the value of ecosystem services to local communities. For example, Greater Côa Valley Rewilding performs well on global biodiversity and climate benefits (0.668) but less so on local NCP provision (0.282), indicating more limited direct benefits to nearby populations.

### 05 Summary

By combining these complementary metrics, investors and lenders can make well-informed decisions on where to direct capital for the greatest positive impact. In this assessment, the Eden Reforestation Project and the Danube Delta Rewilding Project emerge as the most promising in terms of overall benefit. Crucially, financial exposure must also be considered: the deterioration of high-value NCPs can directly translate into financial risks, while their protection enhances resilience and reduces operational deficits. This dual framing of ecological and financial materiality ensures that investment decisions are both impactful and sustainable.



## AI-driven Geospatial Analytics

naturealpha.ai