Natural Capital
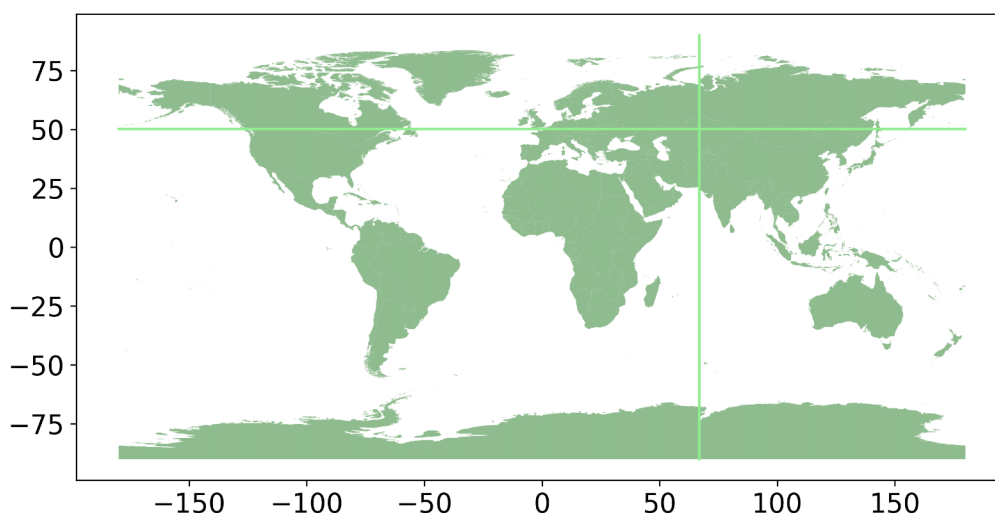# Location Report (Terrestrial)

Sitename: 53_53_1092500

Lat: 50.25

Lon: 66.917

Country: Kazakhstan

The Natural Capital Location Report (Terrestrial) is a report that evaluates the area under interest in terms of biodiversity importance, ecosystem change (degradation), water risk, etc. The report shows the results of the analyses that corresponds to L (Locate) of the LEAP approach presented by the TNFD (Task Force on Nature-related Financial Disclosures).
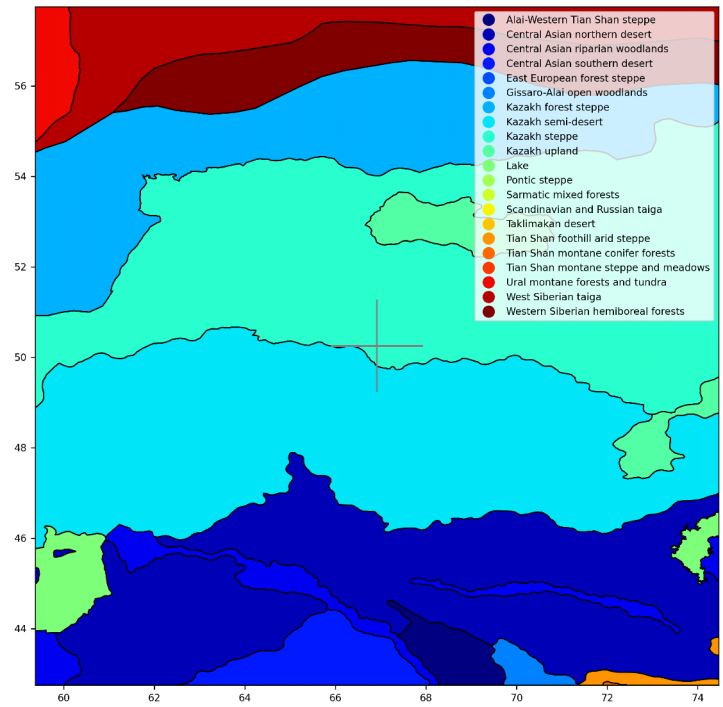
Sitename: 53_53_1092500
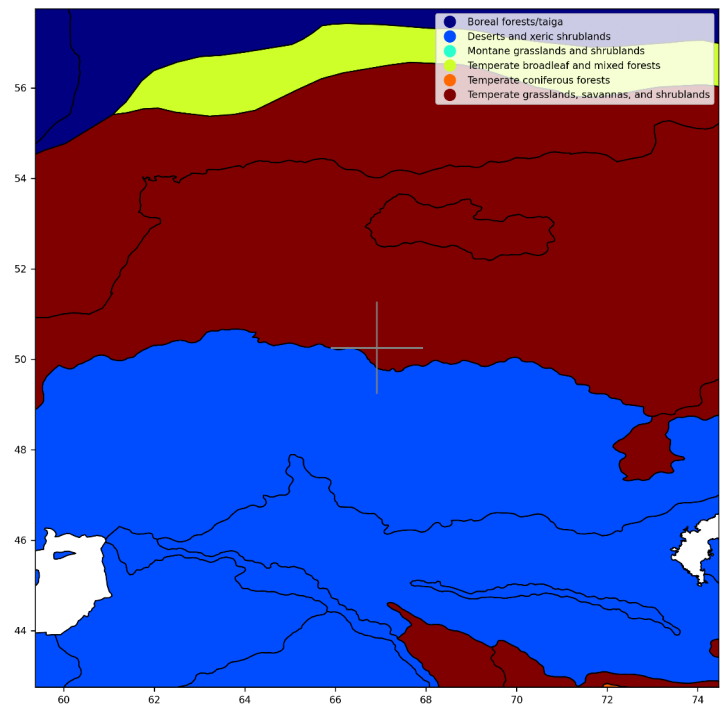Lat: 50.25
Lon: 66.917
Country: Kazakhstan

ECOREGION

Dominant ecoregion around this location is [Kazakh semi-desert]

Legend:
- Alai-Western Tian Shan steppe
- Central Asian northern desert
- Central Asian riparian woodlands
- Central Asian southern desert
- East European forest steppe
- Gissaro-Alai open woodlands
- Kazakh forest steppe
- Kazakh semi-desert
- Kazakh steppe
- Kazakh upland
- Lake
- Pontic steppe
- Sarmatic mixed forests
- Scandinavian and Russian taiga
- Taklimakan desert
- Tian Shan foothill arid steppe
- Tian Shan montane conifer forests
- Tian Shan montane steppe and meadows
- Ural montane forests and tundra
- West Siberian taiga
- Western Siberian hemiboreal forests

BIOME TYPE

Dominant biome type around this location is [Deserts and xeric shrublands]

Legend:
- Boreal forests/taiga
- Deserts and xeric shrublands
- Montane grasslands and shrublands
- Temperate broadleaf and mixed forests
- Temperate coniferous forests
- Temperate grasslands, savannas, and shrublands

1. Terrestrial Biodiversity Importance

Global level: [MODERATELY LOW]
National level: [INTERMEDIATE]

Terrestrial Biodiversity Importance
Map around the location
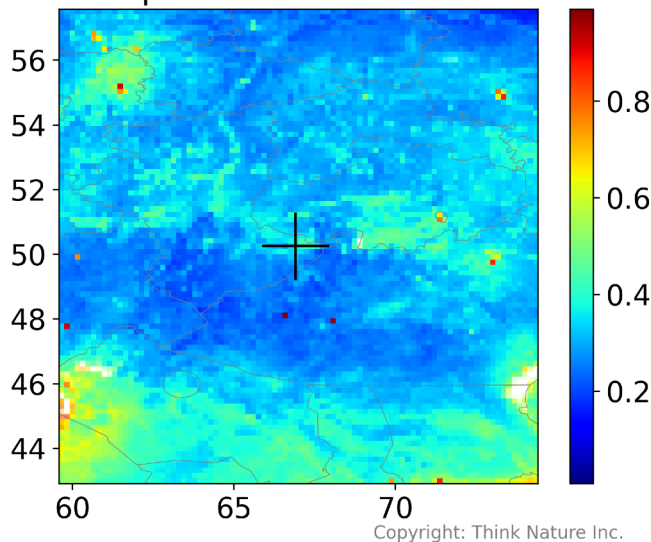
Copyright: Think Nature Inc.

Terrestrial Biodiversity Importance
Histogram at global scale

TOP
62.1%

Copyright: Think Nature Inc.

Terrestrial Biodiversity Importance
Histogram at Kazakhstan

TOP
41.2%

Copyright: Think Nature Inc.
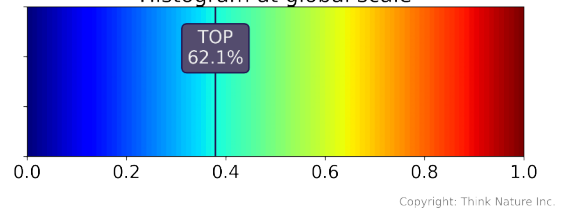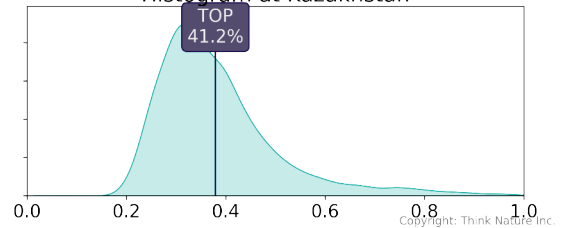
**The site here has #TOP 62.1% rank at the global scale, meaning [MODERATELY LOW] importance of terrestrial biodiversity.
Among Kazakhstan, the site here has #TOP 41.2% rank at national level, meaning [INTERMEDIATE] importance of terrestrial biodiversity.**

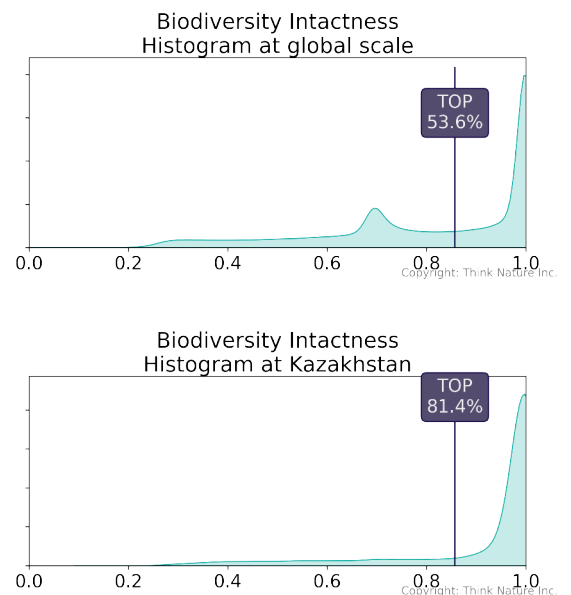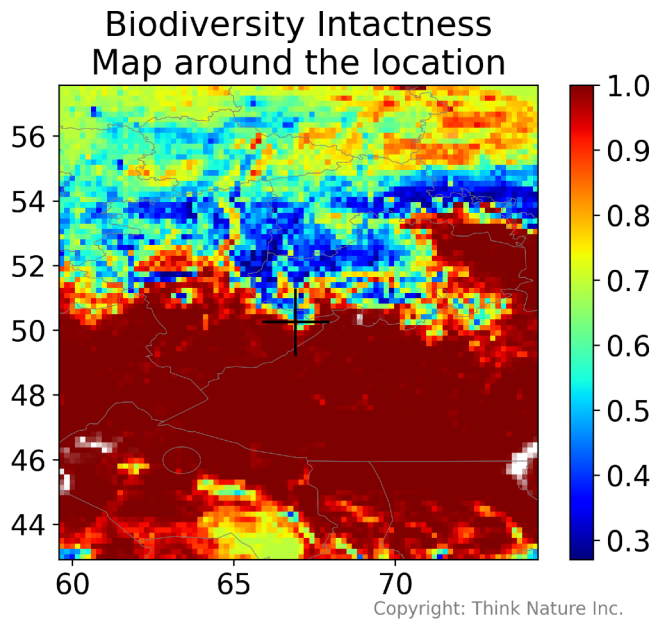**Terrestrial Biodiversity Importance:**

An indicator of the importance of site's biodiversity in terms of extinction risk reduction, calculated using the species composition of +120,000 vertebrate and tree species, ranging from 0 to 1, with higher values indicating greater importance.

Min	Max	Unit
0	1	[Score]

Sitename: 53_53_1092500
Lat: 50.25
Lon: 66.917
Country: Kazakhstan

2. Biodiversity Intactness

Global level: **[INTERMEDIATE]**
National level: **[LOW]**

Biodiversity Intactness Map around the location

Copyright: Think Nature Inc.

Biodiversity Intactness Histogram at global scale

TOP 53.6%

Copyright: Think Nature Inc.

Biodiversity Intactness Histogram at Kazakhstan

TOP 81.4%

Copyright: Think Nature Inc.

**The site here has #TOP 53.6% rank at the global scale, meaning [INTERMEDIATE] intactness of ecosystem.
Among Kazakhstan, the site here has #TOP 81.4% rank at national level, meaning [LOW] intactness of ecosystem.**
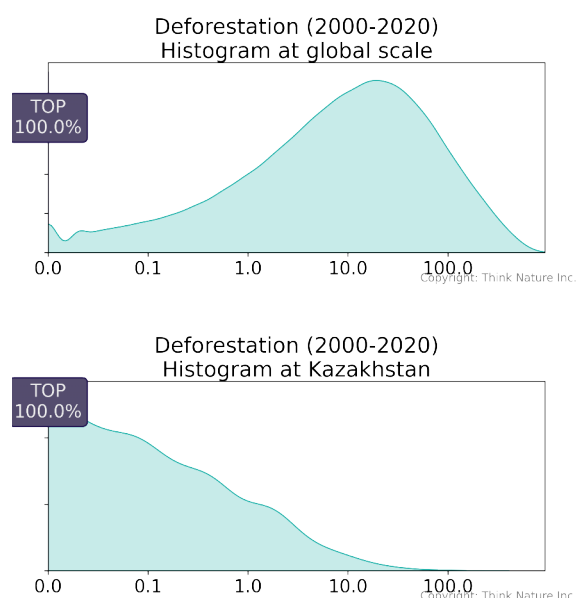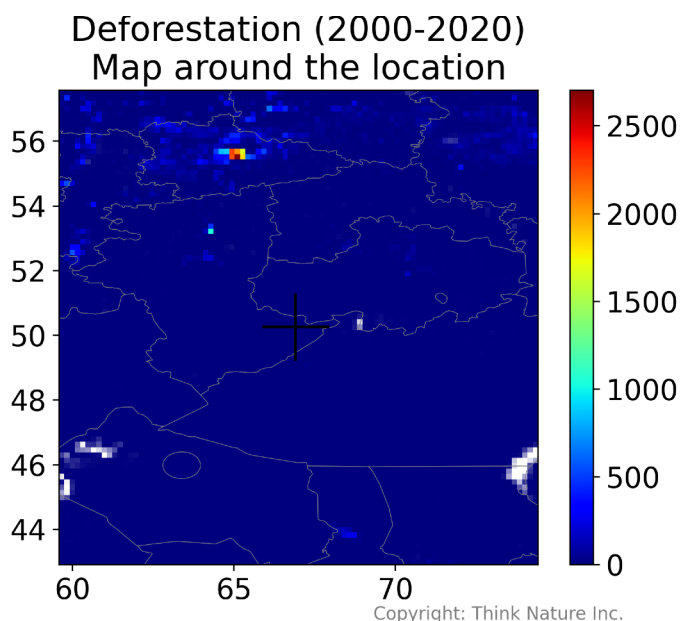
Biodiversity Intactness:

An index that quantifies the degree of modification of ecosystems due to land use. Higher values indicate a higher degree of ecosystem integrity.

Min	Max	Unit
0	1	[Score]

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3. Deforestation (2000-2020)

Global level: [VERY LOW]
National level: [VERY LOW]

Deforestation (2000-2020)
Map around the location

Copyright: Think Nature Inc.

Deforestation (2000-2020)
Histogram at global scale

TOP 100.0%

Copyright: Think Nature Inc.

Deforestation (2000-2020)
Histogram at Kazakhstan

TOP 100.0%

Copyright: Think Nature Inc.

The site here has #TOP 100.0% rank at the global scale, meaning [VERY LOW] decrease in forest area. The percentile rank is calculated so that high rank mean a rapid decline of forest area, suggesting a risk of deforestation.
Among Kazakhstan, the site here has #TOP 100.0% rank at national level, meaning [VERY LOW] deforestation.

Deforestation (2000-2020):

The amount of decrease in area occupied by forests over the past 20 years in the percentage of each grid (approximately 15 km in circumference). Greater values correspond to high risk of deforestation. Values for grids with increase in fores area are set to 0 (no net deforestation). Values are repesented in basis points (‰).
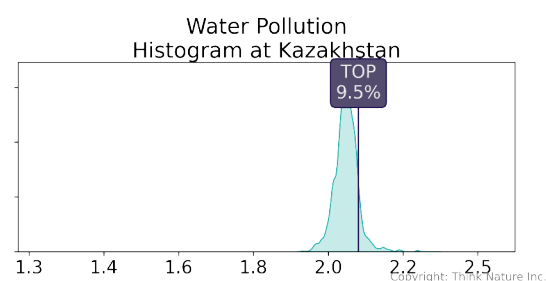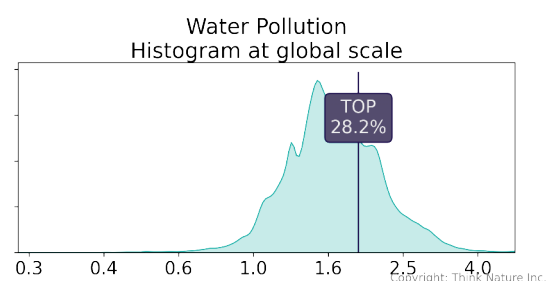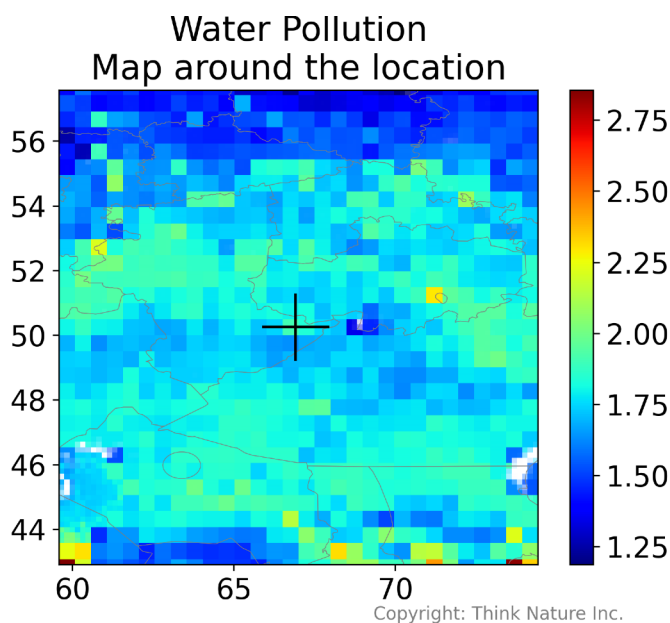
Min	Max	Unit
0	10000	‰

4. Water Pollution

Global level: [MODERATELY HIGH]
National level: [VERY HIGH]

Water Pollution
Map around the location

Copyright: Think Nature Inc.

Water Pollution
Histogram at global scale

TOP 28.2%

Copyright: Think Nature Inc.

Water Pollution
Histogram at Kazakhstan

TOP 9.5%

Copyright: Think Nature Inc.

The site here has #TOP 28.2% rank at the global scale, meaning [MODERATELY HIGH] level of water pollution.
Among Kazakhstan, the site here has #TOP 9.5% rank at national level, meaning [VERY HIGH] level of water pollution.

Water Pollution:

The value of BOD, a comprehensive indicator of overall water quality; a value below 2 indicates high quality water, such as a mountain stream.

Min	Max	Unit
0	5	mg-O2/L

Sitename: 53_53_1092500
Lat: 50.25
Lon: 66.917
Country: Kazakhstan

5. Human Footprint Increase

Global level: [MODERATELY HIGH]
National level: [HIGH]

Human Footprint Increase Map around the location

Copyright: Think Nature Inc.

Human Footprint Increase Histogram at global scale

TOP 28.5%

Copyright: Think Nature Inc.

Human Footprint Increase Histogram at Kazakhstan

TOP 15.7%

Copyright: Think Nature Inc.
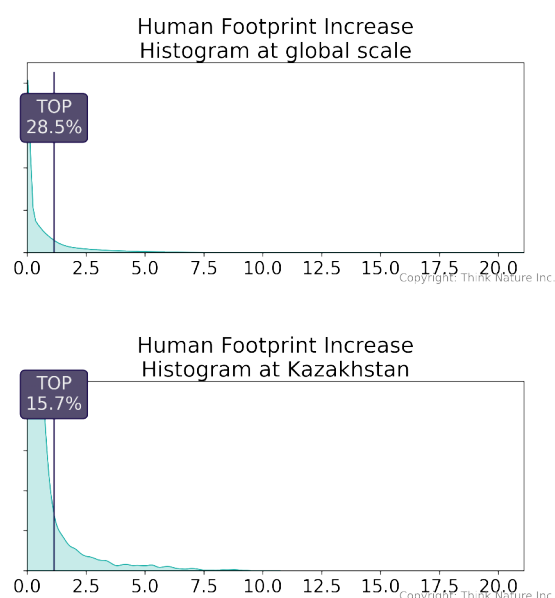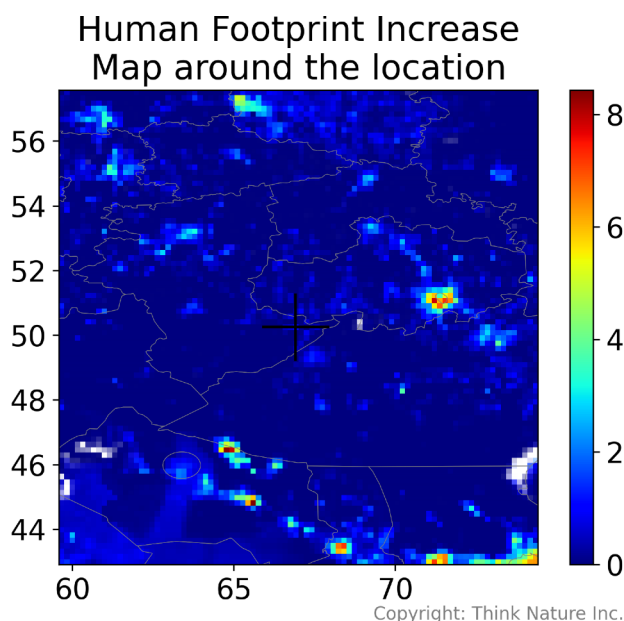
The site here has #TOP 28.5% rank at the global scale, meaning [MODERATELY HIGH] increase in human footprint. Greater value indicates greater increase in footprint, so the high rank means the risk of human pressure to the environment.
Among Kazakhstan, the site here has #TOP 15.7% rank at national level, meaning [HIGH] risk of increased human pressure.
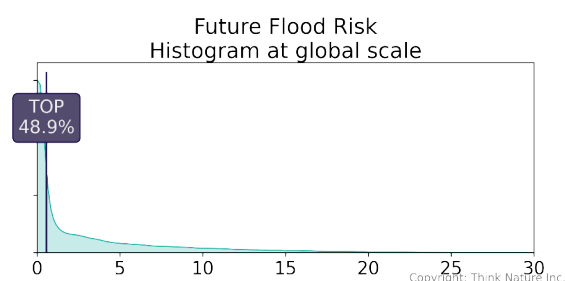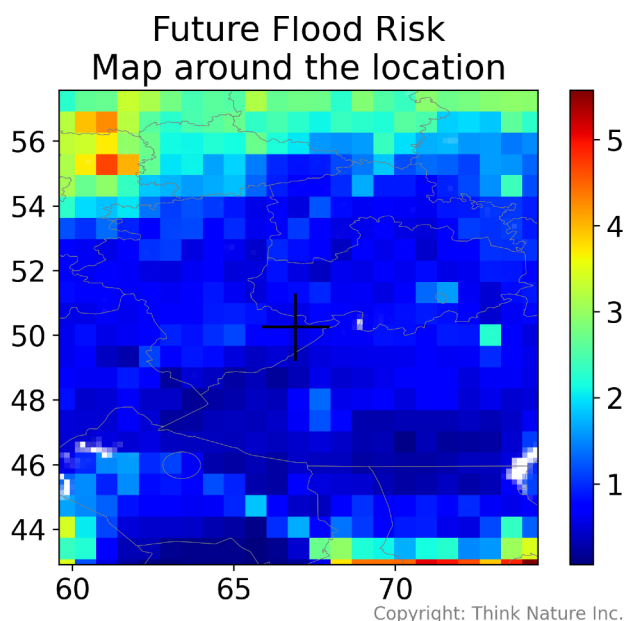
Human Footprint Increase:

The values represents increase in Human Footprint Index, an index that integrates human pressure on the environment and scores it on a scale from 0 to 50, from 2000 to 2019. Grids that show a decrease in this index are assigned a value of 0, indicating (net reduction in human footprint).

Min	Max	Unit
0	50	[Score]

6. Future Flood Risk

Global level: [INTERMEDIATE]
National level: [MODERATELY LOW]

Future Flood Risk
Map around the location

Copyright: Think Nature Inc.

Future Flood Risk
Histogram at global scale

TOP 48.9%

Copyright: Think Nature Inc.

Future Flood Risk
Histogram at Kazakhstan

TOP 72.2%

Copyright: Think Nature Inc.

The site here has #TOP 48.9% rank at the global scale, meaning [INTERMEDIATE] risk of flooding.
Among Kazakhstan, the site here has #TOP 72.2% rank at national level, meaning [MODERATELY LOW] risk of flooding.

Future Flood Risk:

Risk value of flood frequency under the climate
for the next 20 years predicted from the frequency
of past flood damage

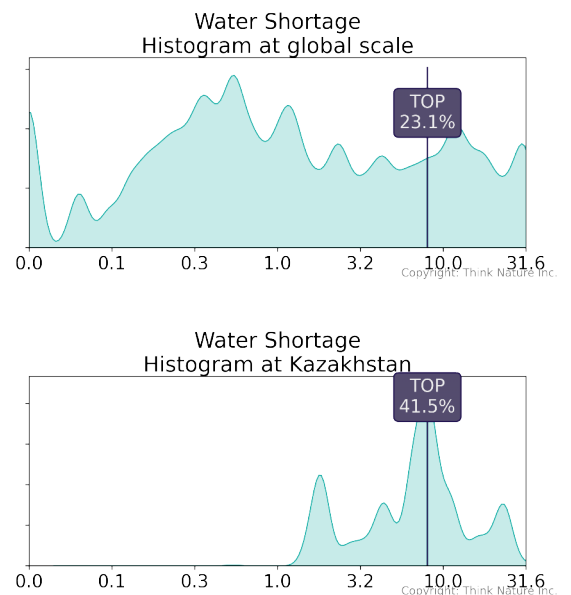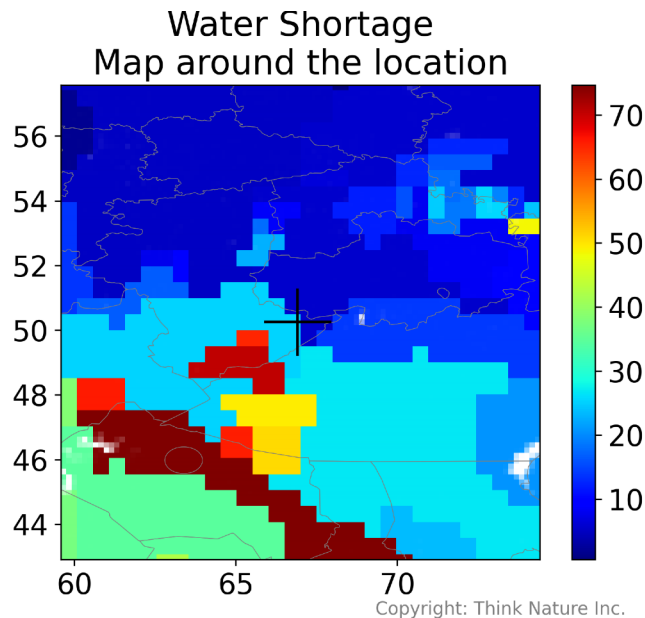| Min	Max	Unit
0	30	[Score]

Sitename: 53_53_1092500
Lat: 50.25
Lon: 66.917
Country: Kazakhstan

7. Water Shortage

Global level: [HIGH]
National level: [INTERMEDIATE]

Water Shortage
Map around the location

Water Shortage
Histogram at global scale

TOP 23.1%

Water Shortage
Histogram at Kazakhstan

TOP 41.5%

Copyright: Think Nature Inc.

The site here has #TOP 23.1% rank at the global scale, meaning [HIGH] tendency to face water shortage.
Among Kazakhstan, the site here has #TOP 41.5% rank at national level, meaning [INTERMEDIATE] tendency to face water shortage.

Water Shortage:

How little water is available; a value of 1 indicates that there is as much available water as the global average, while a value of 10 indicates that there is only 1/10th of the global average.

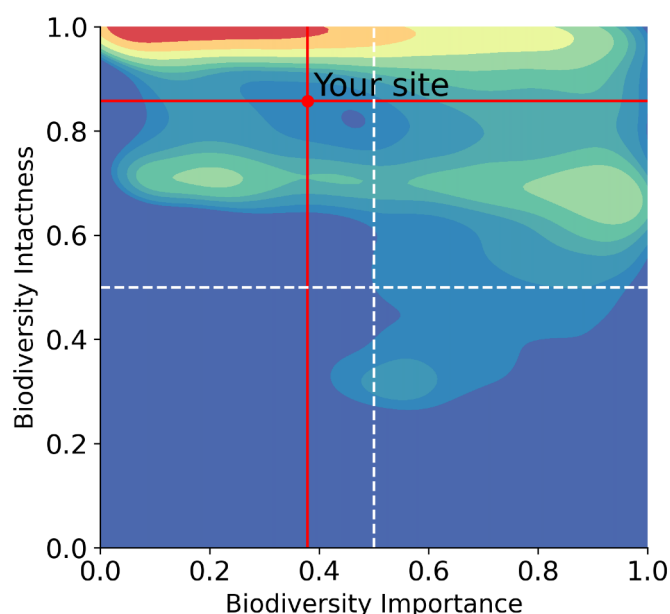| Min	Max	Unit
0	100	[Score]

Sitename: 53_53_1092500
Lat: 50.25
Lon: 66.917
Country: Kazakhstan

Global context

In the global context, Biodiversity importance of the location is [Low], and Biodiversity Intactness of the location is [High].

Thus, the areas around focused site are suitable for uses of natural commodities and ecosystem services (e.g. renewable energy plants).

Background density plot shows the distribution of points in importance-intactness axes in global level with red means high density and blue low.

National context

In the national context, Biodiversity importance of the location is [Low], and Biodiversity Intactness of the location is [Low].

Thus, the areas around focused site have large potential for improvement in natural areas through restoration activities.

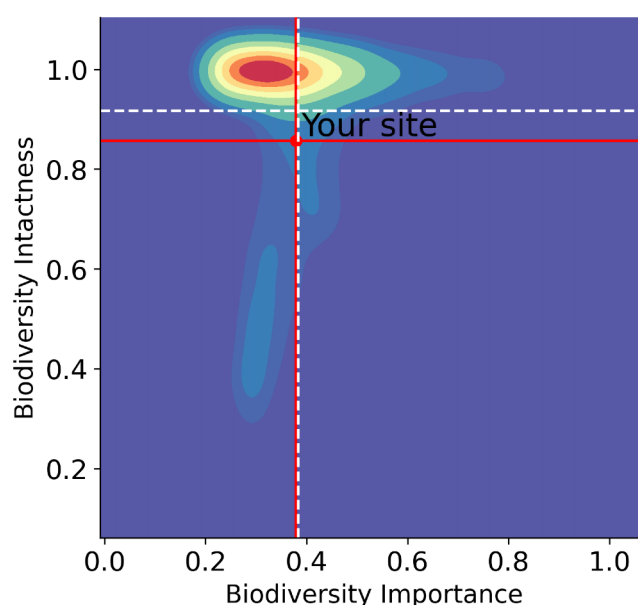Background density plot shows the distribution of points in importance-intactness axes in national level with red means high density and blue low. Note that white broken lines show the national average of the two metrics.
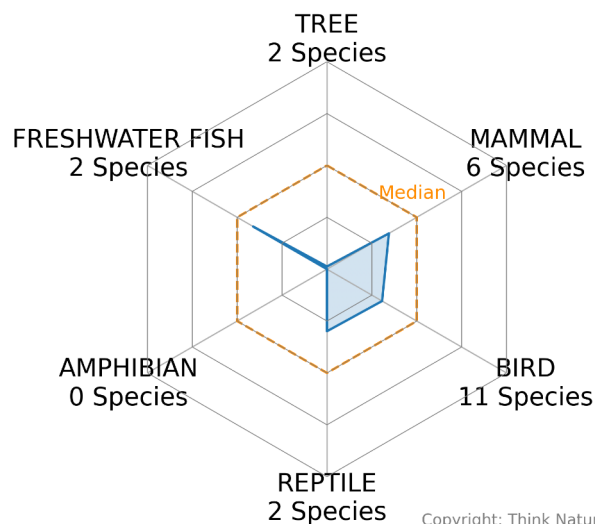
Sitename: 53_53_1092500
Lat: 50.25
Lon: 66.917
Country: Kazakhstan

SPECIES RICHNESS
BY TAXONOMIC GROUPS - DETAILED OPTION

This locality is in an under-researched area where information on biodiversity is extremely scarce. Although our biodiversity datasets make the most of field records of species collected by researchers all over the world, species richness estimation and biodiversity importance indicator for this locality might be underestimated.

TREE
2 Species

MAMMAL
6 Species

FRESHWATER FISH
2 Species

Median

BIRD
11 Species

AMPHIBIAN
0 Species

REPTILE
2 Species

BIODIVERSITY IMPORTANCE
BY TAXONOMIC GROUPS - DETAILED OPTION

This locality is in an under-researched area where information on biodiversity is extremely scarce. Although our biodiversity datasets make the most of field records of species collected by researchers all over the world, species richness estimation and biodiversity importance indicator for this locality might be underestimated.

TREE RANK
Top77.3 %

FRESHWATER FISH RANK
Top40.6 %

MAMMAL RANK
Top43.9 %

Median

AMPHIBIAN RANK
Top51.9 %

BIRD RANK
Top41.9 %

REPTILE RANK
Top38.5 %