



WAIN RIVER PROTECTED FOREST: WITH GREAT BENEFITS COME GREAT RESPONSIBILITIES

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Located 15 kilometers from Balikpapan's city center in East Kalimantan, Wain River Protected Forest (WRPF) plays an important part in the life of the surrounding urban area. This 9,782-hectare protected forest is extremely lush with a high level of biodiversity to maintain the natural balance in an ecosystem, especially along the river.

With Great Benefits Come Great Responsibilities



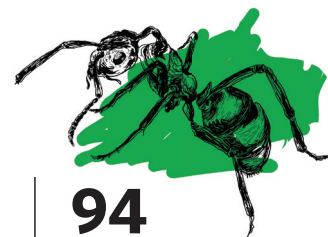
The Biodiversity in Wain River Protected Forest

225
species of wild animals

29% listed in the red list of IUCN

234
avian species

32 32 categorized as protected species



94
mammalian species

45 45 categorized as protected species

17
fish species

17
amphibian species

126
insect species

The Endangered Species of Wain River Protected Forest

Clouded leopard

(*Neofelis nebulosa*)

Sun bear

(*Helarctos malayanus*)

Maroon leaf monkey

(*Presbytis rubicunda*)

Gibbon

(*Hylobates muelleri*)

Orangutan

(*Pongo pygmaeus*)

Long-tailed macaque

(*Macaca fascicularis*)

Southern pig-tailed

(*Macaca nemestrina*)

Proboscis monkey

(*Nasalis larvatus*)
Kalimantan-endemic species

White-fronted surili

(*Nycticebus coucang*)



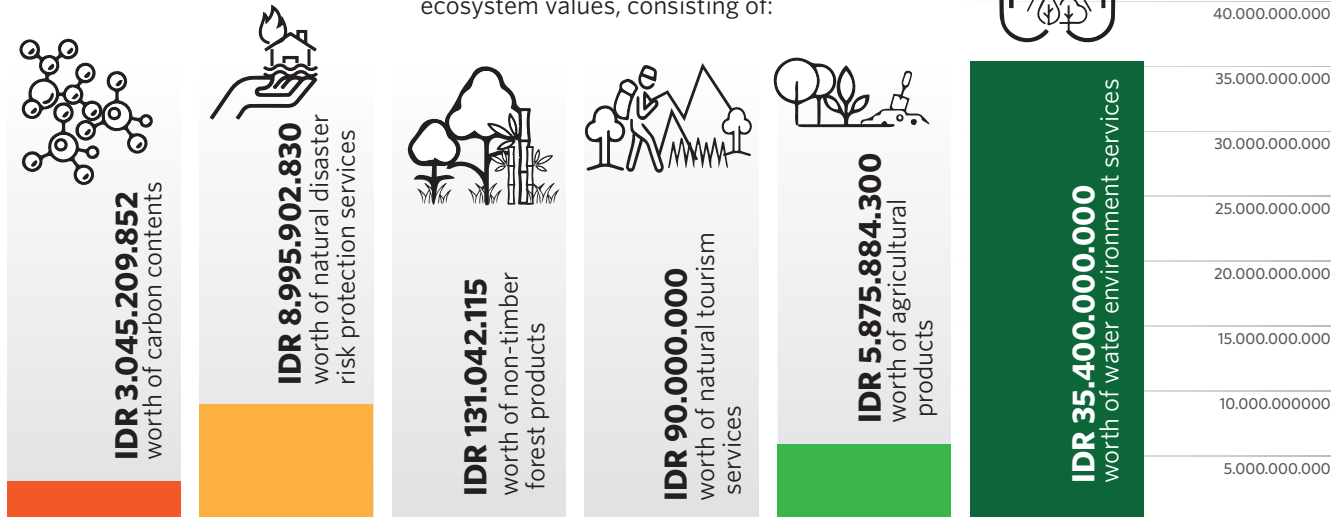
HLSW Economic Value

The Economy Value of Wain River Protected Forest:

IDR 53,538,039,097 worth of annual ecosystem values, consisting of:



(every year)



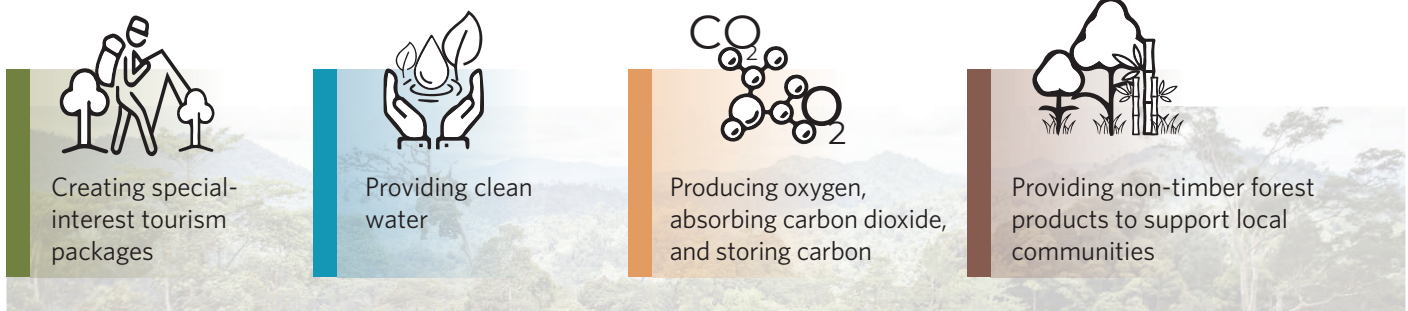
Wain River Protected Forest's Ecosystem Services

Boasting great natural beauty and biodiversity, Wain River Protected Forest (WRPF) is a potential tourist attraction for those who are keen on exploring jungles and rivers. Consisting of a natural primary forest (approximately 5,000 hectares) and a mix of old and new secondary forest areas, which are remnants of forest fires and illegal loggings, WRPF provides resources for the local communities economically, socially, and culturally. In general, protected forests can be utilized through activities, environmental benefits, and non-timber forest products ranging from palm sugar, rubber (latex), bamboo (bamboo shoots), durians (including lai durian), to cempedak, and many more.

Since 2011, the government has allowed

communities to use a 1,400-hectare forest area for cultivating rubber, durian, rambutan, dragon fruit, and vegetables. They can gather firewood, nipah leaves, rattan, bamboo, agarwood, medicinal herbs, grass (to feed cattle), honey, fruits, vegetables, as well as catch fish (Rujehan, 2012).

Not to mention those who dwell outside WRPF may also enjoy clean water from the WRPF Reservoir distributed through Pertamina Refinery Unit V Balikpapan's pipes to residential areas for daily needs, including drinking water. Currently, Pertamina Refinery Unit V Balikpapan utilizes a 3.1-hectare reservoir to get 25 percent of the water needed by the households in the entire Balikpapan, or 450 - 750 m³ per hour (Forest Management Unit Balikpapan, 2015).



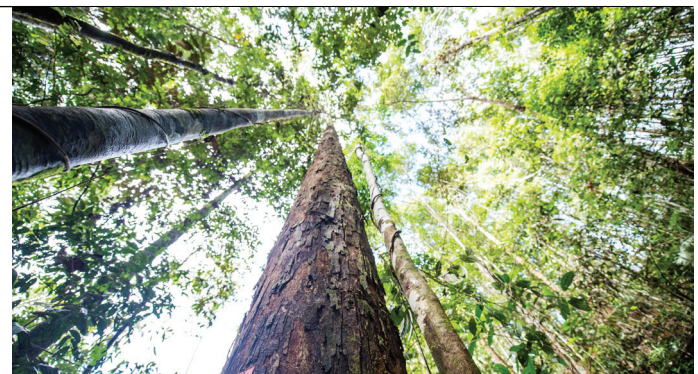
Managing WRPF

Good forest management can protect and increase forest's abilities in protecting and increasing water sources, as well as improving carbon stock, reducing carbon dioxide, producing oxygen, and protecting germplasm and its socio-cultural values. The implementation of the Decree No. 23 in 2014 (UU 23/2014) states that the management of WRPF is now under Balikpapan Protected Forest Management Unit and no longer managed by the WRPF management agency after 16 years.

Good forest management needs reliable, sufficient human resources and ample funding. Consequently, there must be supports from all stakeholders in terms of funding, resources, infrastructures, promotions, ideas and best practices to utilize the WRPF area and beyond.

Without those much-needed supports, the WRPF ecosystem functions would decrease, whose signs can already be seen in the quality and quantity of water in the Wain River Reservoir. Based on the satellite image in 2001, the water's color in Wain River Reservoir was blackish blue, but in 2020, it had turned brownish due to high sedimentation. Pertamina Refinery Unit V Balikpapan had dredged the bottom of the reservoir three times, which the last one was in 2015 at the cost of IDR 3 - 4 billion.

In 2015, the reservoir's water level was only 60 centimeters, far from the minimum of 110 centimeters



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required by the Pertamina Refinery Unit V Balikpapan. Furthermore, between 2015 - 2020, the Wain River Reservoir's daily water level experienced a quite high fluctuation. In 2015, it once reached 60 centimeters (Pertamina, 2020), and based on field observations in October 2020, the Bugis River, the stream flowing into the Wain River Reservoir, was flooding. One of the suspected causes was the conversion of land functions for various purposes, especially with the increasing population and the infrastructure development by the Government of Balikpapan City and the Provincial Government of East Kalimantan. Forest clearing and mining activities, along with Indonesia's new capital city project, located not far from WRPF, are undeniably contributing factors.

Although the new capital city project in Sepaku and Samboja does not touch WRPF area, but as an ecosystem, we can't ignore the fact they are connected to each other. It will eventually encourage massive



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forest clearing, especially on the north border of WRPF or along the road between WRPF and the concession area of PT Inhutani I.

WRPF has always faced serious threats from outsiders, such as forest fires, forest clearing, illegal logging (of Blambangan woods), wildlife poaching (especially for avian species), and infrastructure constructions that potentially disrupt the hydrological functions of the Wain River. These hydrological issues require strong commitments from the Forest Management Unit Balikpapan, Pertamina Refinery Unit V Balikpapan, and of course, all stakeholders involved.

One of the efforts to increase WRPF management is to encourage Forest Management Unit Balikpapan to increase its funding capacity by using WRPF to generate income and reduce dependency from both the local government budget (APBD) and the state budget (APBN). Moreover, Forest Management Unit Balikpapan can also increase its contribution to the Local Own Revenue in order to strengthen its bargaining position in implementing WRPF management activities.

WRPF's Ecosystem Utilization Scheme

In order to be efficient, WRPF needs distinctive schemes for each ecosystem service utilization:

1. For Wain River Reservoir: Developing inter-regional environmental compensations/fees and/or increasing environmental taxes, retributions, and subsidy in accordance with the Decree No. 23 Year 2019 (UU 32/2009) and the Government Regulation No. 46 Year 2017 (PP 46/2017).
2. For tourism: Developing strategic partnership with Forest Management Unit Balikpapan and the communities in accordance with the Regulation of Ministry of Environment and Forestry No. P.49 Year 2017 (PermenLHK P.49/2017), as well as with the City Government of Balikpapan in accordance with the Decree No. 23 Year 2014 (UU 23/2014), the Government Regulation No. 28 Year 2018 (PP 28/2018), and the Regulation of Ministry of Internal Affairs No. 22 Year 2020 (Permendagri 22/2020)
3. For non-timber forest products: Developing sustainable partnerships in accordance with the Social Forestry's framework regulated under the Regulation of Ministry of Environment and Forestry No. P.83 Year 2016 (PermenLHK P.83/2016) and 18th draft of Government Regulation in Forestry Department (RPP Bidang Kehutanan Draft 18).
4. For environmental carbon: Developing REDD+ implementation scheme in accordance with the Regulation of Ministry of Environment and Forestry No. P.70 Year 2017 (PermenLHK P.70/2017)

To support efforts to obtain (business) income from forest utilization and environmental services, WRPF requires short-term and long-term policies as follows:

Short-term:

1. Drafting regulations on the forest and environmental utilization at the regional level
2. Establishing agreement with potential users and partners
3. Approaching decision makers/authorities to build alliances

Long-term:

1. Drafting regulations on the monetary management from the forest and environmental utilization revenue at the regional level
2. Improving human resources to manage programs and funding
3. Building networks with stakeholders and donors

The success or failure of the utilization of WRPF area highly depends on the ability and preparedness of the Forest Management Unit Balikpapan in mobilizing actions, building narratives and discourses for shared understanding/knowledge, building networks, selecting agents for protecting and supporting policies, and carrying out political movements at the regional level. However, as a Regional Technical Implementation Unit under the East Kalimantan Provincial Forestry Agency, the Forest Management Unit Balikpapan's authority is limited to implementing policies. At the meso and macro policy levels, supports are required from higher authorities/institutions, both from the East Kalimantan Provincial Government and the Central Government.

About YKAN

Yayasan Konservasi Alam Nusantara (YKAN) is a science-based organization which was established in Indonesia in 2014. With the mission to protect lands and waters on which all life depends, YKAN provides innovative solutions for realizing harmony between nature and humans, through effective management, non-confrontational approaches, and building collaborative partnerships with all stakeholders for a sustainable Indonesia.

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