"Integrated protected areas for freshwater Irrawaddy dolphins in the Mahakam River in Indonesia.

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Locations, size of planned or existing protected areas (PAs)

* Natural Reserve Habitat Pesut Mahakam, Muara Pahu, 4100 ha
  (SK: 522.5.51/ K. 471/2009 – district protection)
* Proposed Protected Area in Central Kutai District, 2800 ha

Fig 1. The prospect protected dolphin area (circles) and the Middle Mahakam Area in East Kalimantan, Indonesia
Establishment goal/objectives of Protected Dolphin Areas in the Mahakam

1. Establishment of community-supported protected areas for the freshwater dolphin Pesut Mahakam, *Orcaella brevirostris* to provide efficient habitat protection by implementing habitat quality improving measures by reducing chemical and noise pollution and reducing mortality risks caused by gillnet entanglement and vessel strikes.

2. Protection of fish resources through sustainable fishing methods and law-enforcement of illegal fishing practices with the aim to protect prey resources of the Pesut Mahakam and sustain economic livelihoods of local fishing communities.

3. Riparian forest protection and rehabilitation within the protected area with the aim to reduce erosion and sedimentation, to protect fish spawning areas, fishery sources (tree seeds and fruits providing food for fishes), other protected species, and ecotourism potential.

Concrete results

- Regulations have not been legalized yet but concrete results of conservation action in the PAs include:
  1) Reduced dolphin mortality
  2) 60 fishermen being engaged in sustainable aqua-culture
  3) 25 high schools and 30 elementary schools engaged in environmental education
  4) Increased government attention since international workshop 2009:
    - Government installing sign boards to indicate dolphin habitat and enforce local regulations
    - Government aid to fishermen
    - Government conducting more routine water quality monitoring
General Recommendations for Mahakam Dolphin Habitat Protected Areas:

• Establishing conservation areas in Central Kutai District; Legalizing regulations and prepare binding policies in West and Central Kutai Districts
• Set up a management body of collaborative stakeholders (incl. Community, government, NGOs, companies) that meet on a regular basis to discuss problems and for coordinated action
• Having base funding yearly made available by the government for implementation of policies and regulations
• Establish 24th October as “National Day to Care for Pesut Mahakam” and/or “International Freshwater Dolphin Day”

Specific Policy Recommendations especially within but also outside the Protected Areas:

• Habitat rehabilitation incl. Riparian reforestation (focusing reforestation programs to reserve areas) and enforcing regulations for coal-transport (a ban of coal-barge transport in tributaries and a ban on oceanic coal-tanker ships in the Mahakam)
• Help local communities to engage in sustainable fisheries (such as aquaculture using fish, which is not derived from the river and can be fed on a combination of pellets and vegetables) and other alternative income generation and livelihoods to reduce pressure on natural fish resources
• Monitoring weekly illegal activities (such as electro-fishing) and dolphin occurrence by using trained, local patrol teams. In addition, there should be 3-monthly monitoring of water quality and bi-annual monitoring of dolphin population abundance
Help preserve pesut for future generations

Thanks for your interest