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# Sharavathi Pumped Storage Hydroelectric Project (PSHP)

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The Ministry of Environment, Forest and Climate Change (MoEFCC)'s Forest Advisory Committee (FAC) recently raised serious concerns about the project's potential to cause "enormous damage to the biodiversity" of the Western Ghats, a UNESCO World Heritage Site.

## About the Project

- **Location:** Sharavathi River, **Shivamogga district**, Karnataka
- **Implementing Agency:** Karnataka Power Corporation Limited (KPCL)
- **Installed Capacity:** **2,000 MW**
- **Type:** **Pumped Storage Hydroelectric Project (PSHP)**
- **Upper Reservoir:** **Talakalale Dam**
- **Lower Reservoir:** **Gerusoppa Dam**

## Mechanism

- During **off-peak hours**, water is **pumped uphill** from the lower to the upper reservoir using surplus power.
- During **peak demand**, the water is **released downhill** to generate electricity, thereby balancing grid load and supporting renewable energy integration.

## Infrastructure Plan

- Construction of **five tunnels** and **eight pumping stations**.
- Modelled partly on **Telangana's Kaleshwaram Lift Irrigation Project**.
- Aims also to provide **drinking water to Bengaluru**.

**Ecological & Environmental Concerns:** The project site lies within or adjacent to the Sharavathi Wildlife Sanctuary ESZ, an area of high ecological sensitivity.

## Potential threats include:

Habitat fragmentation and disturbance to evergreen and semi-evergreen forests.

Loss of biodiversity including rare and endemic species.

Alteration of hydrology in Western Ghats streams and catchments.

Increased erosion, siltation, and microclimatic changes due to tunneling and excavation.

## About the Sharavathi River

**Origin:** Western Ghats, near Ambutheertha in Thirthahalli Taluk, Karnataka.

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**Length:** ~128 km

**Drainage Area:** ~2,985 sq. km

**Flow Direction:** Westward, one of the few west-flowing rivers of peninsular India.

**Confluence:** Arabian Sea near Honnavar (Uttara Kannada district).

**Major Tributaries:** Nandihole, Haridravathi, Mavinahole, Hilkunji, Yennehole, Hurlihole, Nagodihole.

**Notable Feature:** Forms Jog Falls (253 m)—one of India's highest waterfalls.

The river basin features rocky outcrops, deep gorges, and fertile plains, supporting diverse ecosystems