

ASSESSING AND RESPONDING TO WATER RISKS IN THE GREATER MEKONG

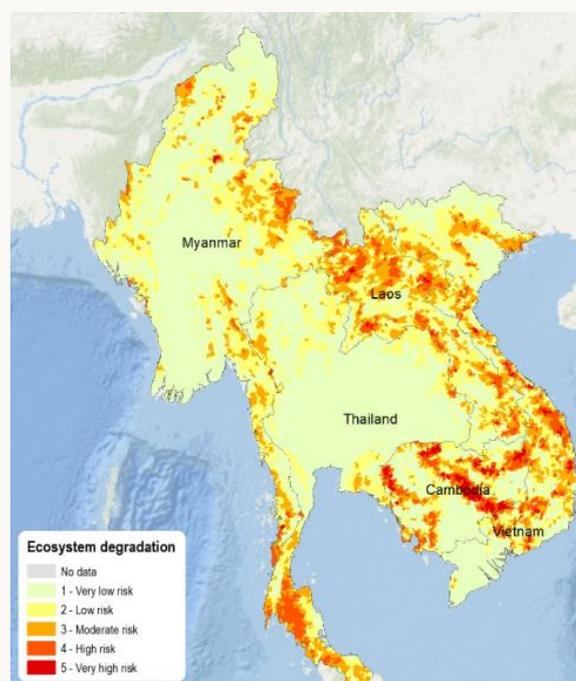
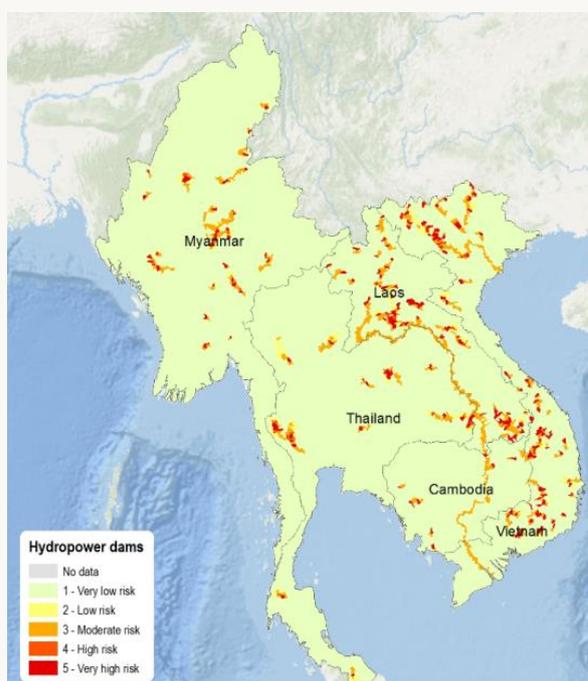
Water is a global challenge, but water risks need to be understood in a local context. With 32 global basin risk indicators and new high resolution data sets for the Greater Mekong, the Water Risk Filter 5.0 provides an unparalleled assessment of water risk across the entire region – enabling companies and financial institutions to better assess and respond to water risk.

Water risks in the Greater Mekong in high resolution

The high resolution data provides a more granular view of water risk than the global data set. The local risk indicator framework and weighting structure for the Greater Mekong remains the same as for the global risk indicators but, where possible, it draws on a number of better quality and more-up-to-date nationally available data sets. When no local data sets for specific risk indicators were available, the global data set is applied for assessing water risks.

High resolution highlights

- High resolution data highlights three hotspots for high water quality risks around Ho Chi Minh, Hanoi and Bangkok.
- The local data set on hydropower dams shows the extent of risks from existing dams in the region, especially along the entire Mekong River. Hydropower can be a reliable and renewable source of energy, but it can seriously harm the environment by altering flow regimes, blocking sediment and nutrient flows, and negatively impacting fish migration and aquatic life.
- High resolution data emphasize the high risks from flooding in the Mekong Delta, Vietnam and Cambodia.
- Applied as a proxy, high resolution data on forest cover was applied to assess water-related ecosystem services degradation across the region as forests play an important role in terms of water regulation, supply and pollution control.

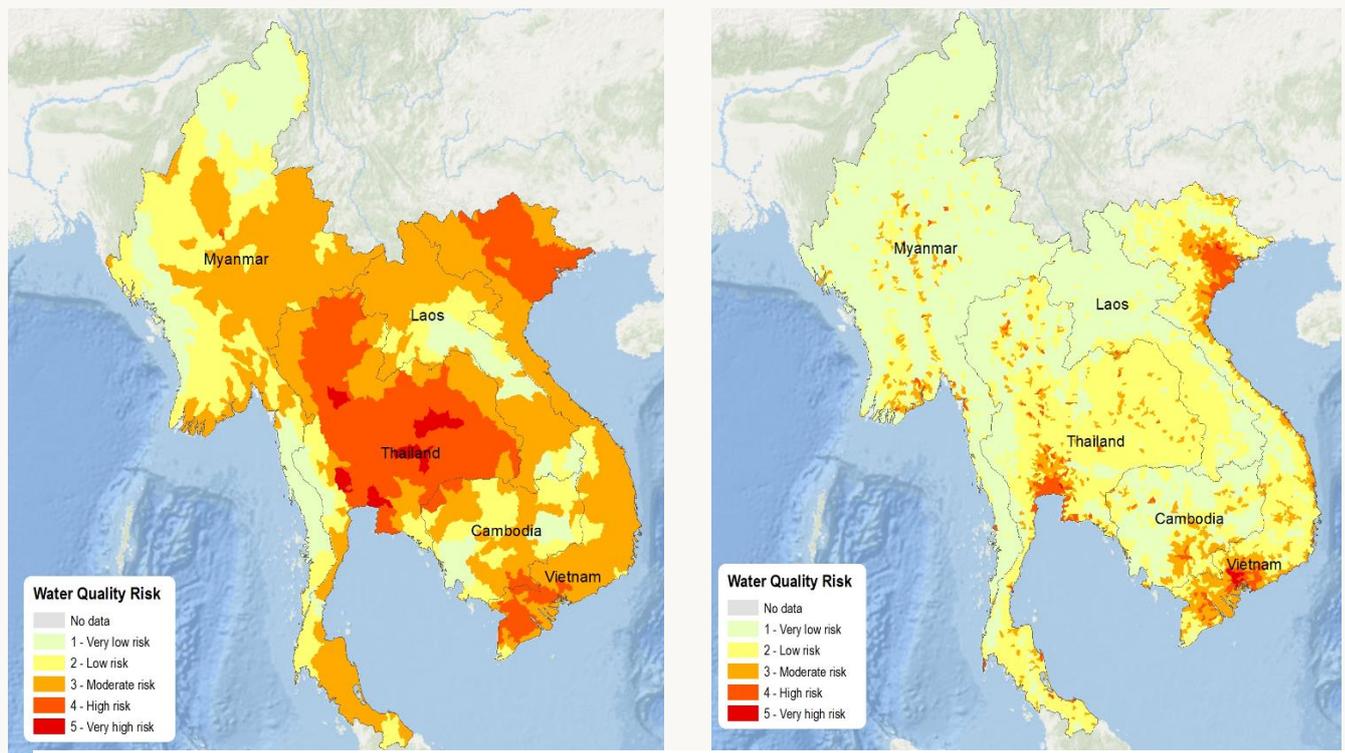


High resolution maps of risks from hydropower dams (left) and catchment ecosystem services degradation (right)

Global & Local High Resolution Data

The high resolution data provides a more detailed and accurate assessment of water risk for portfolios of sites that fall entirely in the specific region of interest as illustrated below by the water quality risk maps at the global vs local scale. Moreover, the high resolution water quality data includes specific water pollution factors for the region such as in this case risks related to arsenic and saline intrusion in the Greater Mekong.

However for companies with operations and suppliers located across the world, the global data set allows for a general overview and comparison of water risks in different regions which can help prioritize mitigation efforts of water risks.



Map of water quality risks at global scale (left) and local scale (right)

Responding to Water Risks

Water is a local issue and high-resolution data is important to inform action on the ground. The new Respond section will dynamically link the water risk assessment results, using the high resolution data, for any given site (or a portfolio of sites) to provide a customized set of mitigation response actions.

Recommended response actions are linked to leading water stewardship frameworks (e.g., Alliance for Water Stewardship, Ceres Aqua Gauge, CDP and CEO Water Mandate's Toolkit) to help users better understand and align with the broader water stewardship ecosystem.

To become a leading water steward, mitigating water risks requires engaging with other basin stakeholders in collective action. WWF is working closely with interested private sector actors to explore collective actions to address basin water risks in the Mekong region.



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For more information, contact:
Ms. Shannon WANG, WWF Greater Mekong
Shannon.siyaowang@wwfgreatermekong.org