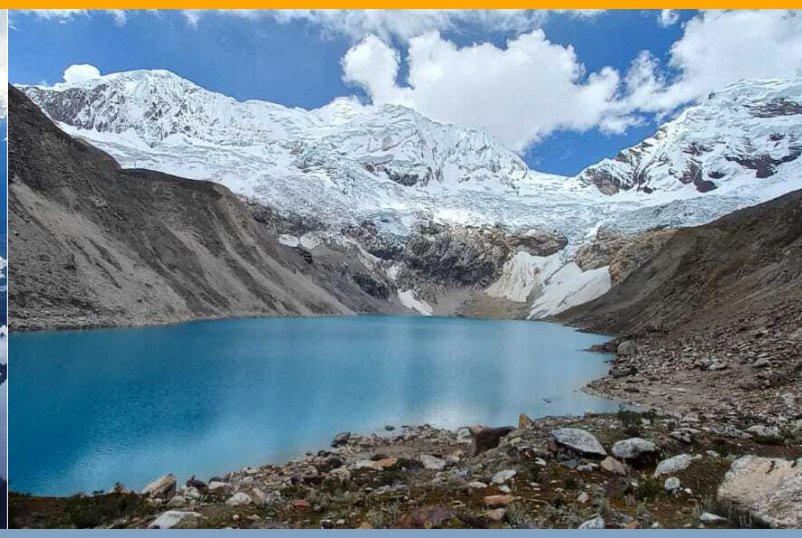
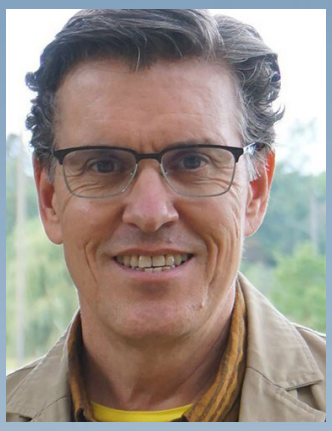
Divecha Centre for Climate Change

Climate adaptation for resilient mountain water towers: Insights and opportunities in the Appalachians and Andes





Dr. Christopher Scott

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Friday 23 August 2024, 3:30 pm
at Divecha Centre for Climate Change Auditorium
Tea: 3:00 pm - 3:30 pm

Mountains provide a wide range of ecosystem services globally. Under expanding risks from climate change and other human pressures, mountain water towers are at a crossroads, requiring urgent evidence-based action for adaptation and mitigation to enhance their resilience. In this presentation, the speaker reviews climate adaptation experience in Pennsylvania, with emphasis on the Allegheny plateau of the Appalachian Mountains that serve as headwaters for major river systems and the Chesapeake Bay downstream. Additionally, ongoing research and policy engagement are presented from the Andes of Colombia, Argentina, and Chile, where rapid glacier retreat and modified seasonality of river flows has major impacts on hydropower and irrigation. The presentation makes comparative reference to the Himalaya Hindu Kush region. Adaptive management responses to climate change involves improved hydrometeorological forecasting, infrastructure "re-adaptation," and engagement with public agencies and private sector stakeholders using "serious games" scenario planning.