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WHAT IS THE INTERNATIONAL COMMISSION ON LARGE DAMS (ICOLD) DOING ABOUT RESERVOIR SEDIMENTATION?

BY MARTIN J. TEAL

The International Commission on Large Dams (ICOLD, www.icold-cigb.net) is an organization dedicated to advancing the art and science of dam engineering and promoting the wise and sustainable development and management of world's water and hydropower resources. ICOLD also assists nations to prepare to meet the challenges of the 21st century in the development and management of the world's water and hydropower resources. Presently, ICOLD has 31 Technical Committees. Because reservoir sedimentation is a significant issue for nearly all nations regardless of their position along the development spectrum, ICOLD has made reservoir sedimentation a key issue in its publications and committee work for many years.

The Technical Committee on Sedimentation of Reservoirs is currently composed of 18 member countries, each with a representative from their national committee on large dams, and 4 coopted members with special technical expertise. Many of the committee members have contributed articles to this special edition of Hydrolink (*e.g.* CNR, EDF, DPRI, ETH). In addition, committee members contributed to the organization of and papers within "Question 100" at the recently completed (July 2018) ICOLD Congress held in Vienna, Austria (https://www.icoldaustria2018.com). Question 100 dealt exclusively with the topic of reservoir sedimentation and sustainable development and over 40 works were included. A general report on Question 100 was prepared by Professor Sumi[1].

The committee's current activities are focused on drafting two new ICOLD bulletins. The first of these bulletins is nearing completion and deals with National Regulations and Sediment Management Case Studies. In the first part a summary is given of national regulations, where they exist, that impact sediment management options. The second part consists of case studies from different countries that illustrate sediment management efforts regardless of their degree of success.

The second bulletin was only started last year and is tentatively titled Design of Sediment Bypass Systems. The bulletin will focus on design of sediment bypass tunnels and on continuous bypass systems. Topics are expected to include design, operation, monitoring, ecological impacts and economic analysis. Past bulletins developed by the committee can be found on the ICOLD website: www.icold-cigb.net. ■

Martin Teal is the current Chair of the ICOLD Committee on Sedimentation of Reservoirs, which consists of over 20 members representing different countries from all regions of the world. He joined the committee in 2011 as the United States representative and became Chair 2016. He is a Hydraulic Engineer with WEST Consultants in San Diego, California where he serves as Senior Vice President. His experience is in the areas of hydrology, hydraulics, sedimentation and fluvial geomorphology.

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book *Environmental flow assessment: methods and applications*, by J.G Williams, P.B Moyle, G.M. Kondolf, and A. Webb, published by John Wiley & Sons. The senior author gratefully acknowledges the Collegium de Lyon-Institut des Etudes Avancées de l'Université de Lyon, France, the EURIAS Fellowship Programme and the European Commission (Marie-Sklodowska-Curie Actions–COFUND Programme-FP7) for support of this research and manuscript preparation. ■

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