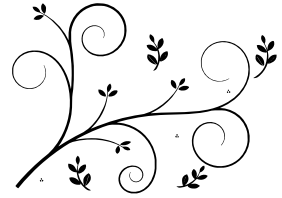


**Monday, January 23**  
**PROGRAM**



**9:30-10:00 Opening Remarks**

**10:00-12:00 Special Lecture 1**  
**Dr. Glenn Benoy**

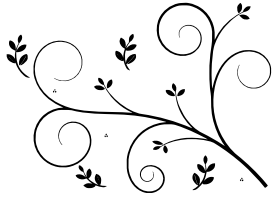
**12:00-13:30 Lunch Break**

**13:30-14:30 Presentation by JDS Fellows 1**  
**Bangladesh**

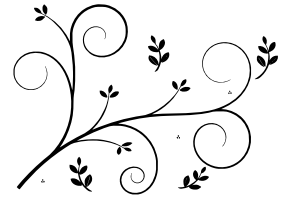
**14:30-15:00 Presentation by JDS Fellows 2**  
**Vietnam**

**15:00-15:15 Break time**

**15:15-16:00 Presentation by JDS Fellows 3**  
**Lao PDR**



**Tuesday, January 24**  
**PROGRAM**



**9:00-10:30 Special Lecture 2**  
**Dr. Quentin Grafton**

**10:45-12:00 Special Lecture 3**  
**Dr. Myra O. Villareal**

**12:00-13:30 Lunch Break**

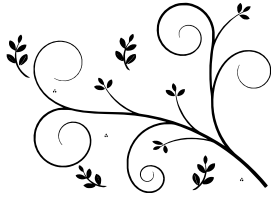
**13:30-14:30 Presentation by JDS Fellows 4**  
**Maldives**

**14:30-15:00 Presentation by JDS Fellows 5**  
**Sri Lanka**

**15:00-15:15 Break time**

**15:15-16:00 Presentation by JDS Fellows 6**  
**Mongolia**

**16:00-16:10 Closing Remarks**



# Monday, January 23

## Special Lecture 1



### **“Transboundary Waters Shared by Canada and the United States: Delivering on the Mandate of the International Joint Commission in a Changing Climate”**

Dr. Glenn Benoy  
Director, Sciences and Engineering,  
International Joint Commission (Canadian Section)  
Fellow, Canadian Rivers Institute,  
University of New Brunswick

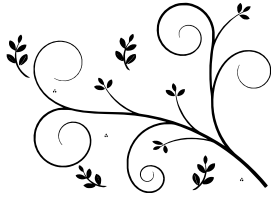


#### **Abstract**

From coast to coast to coast, there are rivers and lakes, and their watersheds, that straddle the Canada-United States border, the longest international border in the world. As a result of conflicts over water resources in the late 1800s and the early 1900s, the governments of Canada and the United States signed the Boundary Waters Treaty in 1909. Article 7 of the treaty established the International Joint Commission (IJC), a binational organization that has a mandate to prevent and resolve disputes involving shared waters. The IJC has two primary responsibilities. First, it designs, monitors, and evaluates regulation plans concerning managed water levels and flows along the border. Second, it develops advice and recommendations to address specific binational issues, such as flooding, water diversions, and nutrient pollution. In the 21<sup>st</sup> century, shared waters are perhaps facing perhaps their greatest challenge: climate change. This presentation discusses the work of the IJC, an examination of key case studies, how a signature IJC program – the International Watersheds Initiative (IWI) – is addressing climate change, and the essential roles that the public and Indigenous peoples play in a modern IJC.

#### **Profile**

Dr. Glenn Benoy’s work focuses on limnology, environmental modelling, transboundary water resources management, and science diplomacy. Prior to joining the IJC, Glenn was a national manager of freshwater habitat and Arctic science programs with Fisheries and Oceans Canada, and a research scientist in aquatic landscape ecology held jointly between Environment and Climate Change Canada and Agriculture and Agri-Food Canada. He has a Master’s in freshwater biology from McGill University and a PhD in wetland ecology and wildlife science from the University of Guelph, and he held post-doctoral fellowships at the University of Calgary and the National Hydrology Research Centre. Glenn and his family live in Ottawa, Ontario, a city with a rich cultural heritage that is surrounded by natural beauty.



# Tuesday, January 24

## Special Lecture 2



### “Water and Food Risks Towards 2050: The Case for Transformational Change”



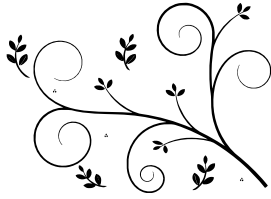
Dr Quentin Grafton  
Lead Expert and Commissioner,  
Global Commission on the Economics of Water  
(<https://www.oecd.org/water/global-commission-water-economics.htm>)  
Australian Laureate Fellow & Chairholder, UNESCO Chair in Water Economics  
Convener, Water Justice Hub (<https://www.waterjusticehub.org/>)  
Executive Editor, Global Water Forum (<https://globalwaterforum.org/>)

#### **Abstract**

The presentation will highlight the systemic risks in the Water-Energy-Food nexus including the two most recent food price spikes (2008-10 and 2020-22) and connect climate change risks to water risks and food risks out to 2050 under two Representative Concentration Pathways. The presentation of risks will be followed by a discussion of existing strategies in the water space and a justification why transformational change is required. A sketch and provocation of what these responses and actions might be, and how they differ to business as usual, will be conclude.

#### **Profile**

Dr Quentin Grafton is Professor of Economics and a UNESCO Chair in Water Economics and Transboundary Water Governance. He is an Australian Laureate Fellow, a Fellow of the Academy of Social Sciences in Australia, a former President (2017-18) of the Australasian Agricultural and Resource Economics Society (AARES) and a Distinguished Fellow of AARES. In 2022, he was appointed a Lead Expert and Commissioner of the Global Commission on the Economics of Water that will report to the UN 2023 Water Conference. He is the Convener of the Water Justice Hub, which has as its mission to respond to water injustice and to promote both ‘voice’ and truth-telling in relation to water, is the Editor of the Global Water Forum,



# Tuesday, January 24

## Special Lecture 3



### “Natural disasters in the Philippines and their impact on public health”

Dr. Myra O. Villareal  
Faculty of Life and Environmental Sciences,  
University of Tsukuba, Japan



#### Abstract

The Philippines consists of more than 7,000 islands that lie above the equator and facing the western Pacific Ocean, making it one of the most typhoon-prone countries in the world. Typhoons are often accompanied by heavy rains that cause severe floods, which are exacerbated by the lack of adequate drainage infrastructure in urban areas. Public health emergencies are common after floods. For example, after Typhoon Ondoy (Tropical Storm Ketsana), which caused the worst flooding in 50 years in the Philippines, more than 2,000 people were treated for bacterial infection (leptospirosis), and 162 people died from complications. In this presentation, I will discuss the public health impact of natural disasters in the Philippines, and what actions were taken to mitigate them.

#### Profile

Dr Myra Villareal is a functional food scientist who has published numerous scientific articles on the effects of food on health. Her main areas of teaching include functional food research for health, research in cell and molecular biology, and environmental/agrobiosciences courses. This year, through the Philippine Department of Science and Technology (DOST), she has participated in the Philippine government's efforts to strengthen the scientific and technological capabilities of local researchers in the academe, public and private sectors, particularly in health research and development.