

## **ACTION ITEM**

### Appointment of Delta Independent Science Board Members

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**Summary:** Delta Lead Scientist Dr. Laurel Larsen will report on the results of the search to fill one current vacancy and two upcoming vacancies on the Delta Independent Science Board (Delta ISB) and provide her nominations for the Council's consideration for appointment.

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#### **REQUESTED ACTION**

Dr. Larsen requests that the Council consider appointing Dr. Jayantha Obeysekera, Dr. Anna Michalak, and Dr. Inge Werner as members to the Delta ISB for a five-year term, pursuant to Water Code section 85280(a)(1). If appointed by the Council, Dr. Obeysekera's five-year term would begin June 1, 2022, and Dr. Michalak's and Dr. Werner's five-year terms would begin November 1, 2022.

#### **BACKGROUND**

The Delta ISB was created by the Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act), Water Code sections 85000, et seq., to provide oversight of the scientific research, monitoring, and assessment programs that support adaptive management of the Delta (Water Code Section 85280(a)). The Delta Reform Act specifies the following criteria for Delta ISB members:

The Delta Independent Science Board shall consist of no more than ten members appointed by the Council. The term of office for members of the Delta Independent Science Board shall be five years. A member may serve no more than two terms (Water Code Section 85280(a)(1)).

Members of the Delta Independent Science Board shall be nationally or internationally prominent scientists with appropriate expertise to evaluate the broad range of scientific programs that support adaptive management of the Delta. The members shall not be directly affiliated with a program or agency subject to the review activities of the Delta Independent Science Board (Water Code Section 85280(a)(2)).

There is currently one vacancy on the Delta ISB due to the resignation of Dr. Jim Cloern in June 2021. In addition, there will be two upcoming vacancies on the Delta ISB when Dr. Harindra Fernando and Dr. Jay Lund complete their second five-year terms in October 2022.

The search to fill these positions began in October 2021 with the posting of a recruitment notice advertising for internationally prominent scientists with a wide range of expertise to serve on the Delta ISB. The recruitment notice solicited prominent scientists with expertise in water resources engineering, hydrodynamics, climate science, algal or invasive species ecology, or ecotoxicology. The recruitment notice was distributed via the Delta Stewardship Council listserv and other organizations, including: (1) the Coastal and Estuarine Research Federation, (2) the National Society of Black Engineers, (3) International Association for Society and Natural Resources, and (4) the Association of Women in Water, Energy, and the Environment. In addition, Dr. Larsen contacted individuals to apply for the positions based on input from current and former Delta ISB members and the larger Delta community.

Applications were due by November 30, 2021, for the first round of review, and by February 1, 2022, for the second round of review. Application materials included a letter of interest, a curriculum vitae, and a list of five references. Ten applications were received for the three positions.

#### **DELTA ISB NOMINATIONS**

Dr. Larsen, with staff from the Delta Science Program and the U.S. Geological Survey, reviewed the ten applications and selected five candidates for interviews based on prior work on panels, publication record, engagement on resource management issues, experience working in complex systems, and the expertise that they would bring to the Delta ISB. Based on the application materials, interviews, and reference checks, Dr. Larsen would like to nominate the following three individuals, whose qualifications are described below, for the Council's consideration for appointment to the Delta ISB for a five-year term, pursuant to Water Code section 85280(a)(1): Dr. Jayantha Obeysekera, Dr. Anna Michalak, and Dr. Inge Werner.

All of the nominees meet the criteria specified in the Delta Reform Act for Delta ISB members (Water Code section 85280(a)(2)). If appointed by the Council, Dr. Obeysekera's five-year term would begin on June 1, 2022, while Dr. Michalak's and Dr. Werner's terms will begin on November 1, 2022.

*Dr. Jayantha Obeysekera*

Director, Sea Level Solutions Center, Institute of Environment, Florida International University, Miami

Dr. Obeysekera has extensive national and international experience in the planning and management of water resources systems, with particular emphasis on

modeling and implications of climate change. Before joining the Florida International University, he managed a large group of hydrologic and environmental modelers, directed the modeling associated with the Comprehensive Everglades Restoration Program and climate change projections, and helped establish the Interagency Modeling Center at the South Florida Water Management District. Dr. Obeysekera has served as a member of several committees of the National Academy, including those associated with the Sustainable Water & Environmental Management in California Bay-Delta, California Bay Delta Conservation Plan, Edwards Aquifer in Texas, and the Klamath River in Oregon. He was a member of the federal advisory committee that directed the development of the 2014 National Climate Assessment and co-authored several sea level rise projections reports published by the National Oceanic and Atmospheric Administration. Dr. Obeysekera was also a member of the Coastal Assessment Regional Scenario Working Group associated with the Department of Defense in the United States. Currently, Dr. Obeysekera serves as a Director of the Sea Level Solutions Center at Florida International University.

Dr. Obeysekera holds a bachelor's degree in Civil Engineering from the University of Sri Lanka, M. Eng. from the University of Roorkee, India, and a Ph.D. in Civil Engineering from Colorado State University. Dr. Obeysekera has co-authored over 70 research articles in numerous peer-reviewed journals. He is a recipient of the 2015 Norman Medal of the American Society of Civil Engineers for a technical paper that makes a definitive contribution to engineering.

For more information, please refer to Dr. Obeysekera's curriculum vitae (Attachment 1).

*Dr. Anna Michalak*

Director, Department of Global Ecology, Carnegie Institution for Science, Stanford, California

Dr. Michalak's research interests lie in two areas. The first is assessing the impacts of climate change on inland and coastal water quality via influences on nutrient delivery to, and on conditions within, water bodies. The second area is understanding and quantifying the cycling and emissions of greenhouse gases at the Earth's surface at urban to global scales – scales directly relevant to informing climate and policy – primarily through the use of atmospheric observations that provide the clearest constraints at these critical scales. Her approach is highly data-driven, with a common methodological thread being the development and application of methods for optimizing the use of limited in situ and remote sensing environmental data. Dr. Michalak is the Director of the Department of Global

Ecology of the Carnegie Institution for Science and a Professor in the Department of Earth System Science and the Department of Biology at Stanford University. Previously, she was the Frank and Brooke Transue Faculty Scholar and Associate Professor at the University of Michigan in Ann Arbor, with appointments in the Department of Civil and Environmental Engineering and the Department of Atmospheric Oceanic and Space Sciences.

Dr. Michalak holds a Ph.D. and M.S. in Civil and Environmental Engineering from Stanford University and a B.Sc.(Eng.) in Environmental Engineering from the University of Guelph, Canada. Dr. Michalak is the lead author of the U.S. Carbon Cycle Science Plan, Chair of the Scientific Advisory Board for the European Integrated Carbon Observation System, and Member of the National Academies Committee on Earth Sciences and Applications from Space. Dr. Michalak has published 139 scientific papers.

For more information, please refer to Dr. Michalak's curriculum vitae (Attachment 2).

*Dr. Inge Werner*

Director, Swiss Centre for Applied Ecotoxicology, Dübendorf, Switzerland (Retired)

Dr. Werner's area of expertise is ecotoxicology. Her professional experience ranges from academic research in aquatic toxicology to a broad applied approach to risk and impact assessment in both aquatic and terrestrial environments. Dr. Werner recently retired from the Swiss Centre for Applied Ecotoxicology, where she served as Director from 2010 to 2019. The Centre serves as the primary Swiss knowledge hub for research and development, consulting, and further education in ecotoxicology. In Switzerland, she worked closely with federal and local environmental agencies to improve environmental monitoring programs and cooperated in research projects with academic institutions throughout Europe and the United States. Projects included effect-based ecotoxicological assessments of wastewater treatment technologies and comprehensive environmental risk assessments due to pesticides. Prior to her directorship in Switzerland, Dr. Werner was Director of the Aquatic Toxicology Laboratory and Adjunct Professor at UC Davis. She was on the faculty at UC Davis from 1999 to 2010 and worked extensively in the Delta.

Dr. Werner has served on numerous panels and working groups, most recently on the Scientific Advisory Council of the German Federal Institute of Hydrology, which is the primary German institution advising the federal ministries in matters of utilization and management of federal waterways, and the Guidance Committee for the Assessment of Surface Water Resources in Switzerland, which advises decision-

makers in all aspects of surface water stewardship. Dr. Werner has a master's degree in limnology from Albert-Ludwig University in Freiburg, Germany, and a Ph.D. degree in aquatic ecotoxicology from Johannes-Gutenberg University in Mainz, Germany. Dr. Werner has published 160 scientific articles.

For more information, please refer to Dr. Werner's curriculum vitae (Attachment 3).

#### **FISCAL INFORMATION**

Funding for the Delta ISB is part of the current Delta Science Program budget. Delta ISB members are compensated for their time and travel.

Compensation for Delta ISB members is set by California Water Code 85213 (b):

The Council shall contract for the services of the members of the Delta Independent Science Board established pursuant to Section 85280, at an hourly rate of one hundred fifty dollars (\$150). The council shall increase the hourly rate annually based on inflation and cost of living adjustments.

#### **LIST OF ATTACHMENTS**

Attachment 1: Dr. Jayantha Obeysekera's Curriculum Vitae

Attachment 2: Dr. Anna Michalak's Curriculum Vitae

Attachment 3: Dr. Inge Werner's Curriculum Vitae

#### **CONTACT**

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