CURRICULUM VITAE OF PROFESSOR LALITH RAJAPAKSE

1.0 PRESENT AFFILIATION : - Professor in Civil Engineeering/ Hydraulic and Water Resources Engineering Division
- Centre Chairman (UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM)),
- Course Coordinator (M.Sc. in WREM)

Department of Civil Engineering,
University of Moratuwa,
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2.0 PROPOSED POSITIONS : Hydrologist/ Environmental Hydrologist/ Hydrological Modeller

3.0 EXPERTISE AREA : Surface and Groundwater Hydrology, Watershed & Water Resources Management, Hydrological Modelling, Flood/Inundation/Drainage Analyses, Ecological Modelling, Sediment Transport/Erosion Modelling, Stream Flow Analyses, Basin-wide Nonpoint-source Pollution Management

4.0 NAME OF STAFF : Professor Rajapakse Liyanage Hementha Lalith Rajapakse

5.0 DATE OF BIRTH : 13.07.1970

6.0 NATIONALITY : Sri Lankan

7.0 ACADEMIC QUALIFICATIONS :

Educational Qualification	Place	Period
Primary Education	Nalanda Central College, Minuwangoda, Sri Lanka	1976 - 1981
Secondary Education	Ananda College, Colombo 10, Sri Lanka	1982 - 1989
B.Sc. in Civil Engineering (First Class Honours)	University of Moratuwa, Sri Lanka	1992 - 1996
M.Sc. in Civil & Environmental Engineering (Hydroscience & Geotechnology)	Saitama University, Japan	1997 - 1999
Ph.D. in Environmental Science & Technology (Environmental Hydraulics/Ecological Engineering)	Saitama University, Japan	2002 - 2005

8.0 RECOGNISED TRAINING

- International Webinar Workshop on GeoHECRAS - Breakthrough HEC-RAS Modeling Software Training Webinar held on 08th April 2020 at UNESCO – Madanjeet Singh Center for South Asia Water Management (UMCSAWM), Department of Civil Engineering, University of Moratuwa, Sri Lanka, Conducted by CivilGEO Inc., USA.
- International Workshop on Advancements in Numerical Modelling using MIKE Software - DHI-UMCSAWM Training Workshop held on 07th and 08th March 2018 at UNESCO – Madanjeet Singh Center for South Asia Water Management (UMCSAWM), Department of Civil Engineering, University of Moratuwa, Sri Lanka.
- International Workshop on International River Interface Cooperative (iRIC) - Water Systems Modelling focusing on Modeling River Flow and Morphodynamics within the iRIC Interface, USGS - UMCSAWM Training Workshop held on 01st and 02nd September 2016 at UNESCO – Madanjeet Singh Center for South Asia Water Management (UMCSAWM), Department of Civil Engineering, University of Moratuwa, Sri Lanka.
- International Workshop/Short Course Watershed Modeling using MIKE SHE/ MIKE 11 by Danish Hydraulic Institute (DHI) organized in parallel with the 8th International Perspective on Water Resources and the Environment (IPWE) Conference at the Cinnamon Grand Hotel, January $4^{th} \sim 6^{th}$, 2016, Colombo, Sri Lanka.
- International Workshop on Uncertainty Quantification in Climate Modelling and Projection, International Union of Geodesy and Geophysics, ICTP - International Centre for Theoretical Physics, 13 July 2015 - 17 July 2015, Trieste – Italy.
- International Workshop and Training Programme on Urban Rainwater Harvesting and Decentralised Wastewater Systems, Co-organized by Centre for Environmental Studies, India/ Lanka Rain Water Harvesting Forum, December 10-13, 2013, Kandy.
- International Workshop on Non-point Source Pollutant Management in Agricultural Watersheds organized by Korea Rural Community Corporation and INWEPF (International Network for Water & Ecosystem in Paddy Fields), Seoul-Korea (Oct , 2009).
- Asia Pacific Water Forum (APWF) Water Knowledge-Hub Workshop on Water Quality Management in River Basins conducted by Asian Development Bank-Global Water Partnership (ADB-GWP) Program, Seoul, Korea (August, 2009).
- Workshop on Citarum Water Resources Management Investment Program, Indonesia by Asian Development Bank-Global Water Partnership (ADB-GWP) and K-Water (Korea Water Resources Corporation), Seoul, Korea (August, 2009).
- World City Water Forum (WCWF) Workshop on Basin Water Resources Management and Basin Water Quality and Ecology, Inchon, Korea (August, 2009).
- Certification course in Microsoft Access 2000/ Microsoft Advanced Access 2000 Database Management and SQL (Structured Query Language) Programming by the Infomatics International, Singapore (February/April, 2002).
- Certification course in Project Planning, Scheduling and Management using Primavera Project Planner (P3.0) by the Training Department, Primavera Systems Inc., Singapore (February, 2001).
- Technical Workshop on Mass-scale Water Desalination: Plant Operation, Maintenance and Water Quality Management by AquaGen (Nanyang Technological University, Singapore), Singapore (February, 2000).
- Training Worksop on Groundwater Modelling, Hydroscience and Geotechnology Laboratory, Saitama University, Japan (September 1,999).
- Short Course on Structural Design of High-Rise Buildings conducted by the Buildings and Structural Engineering Division, Department of Civil Engineering, University of Moratuwa, Sri Lanka (November, 1996).

9.0 PROFESSIONAL QUALIFICATIONS

- Corporate Member, Institution of Engineers, Sri Lanka (CEng., MIE-SL)
- Member, International Water Association (IWA)
- Member, The Intl Association for Hydro-Environment Eng and Research (IAHR)
- Associate Member, Japanese Society of Civil Engineers (JSCE/2005~2009)
- Member, Japan Society on Water Environment (JSWE/2007~2009)
- Member, Japan Society of Hydrology and Water Resources (JSHWR/2007~2009)

10.0 EMPLOYMENT RECORD

- Professor in Civil Engineering, Hydraulic and Water Resources Engineering Division, Department of Civil Engineering, University of Moratuwa.
  - Professor in Civil Engineering, Dept. of Civil Eng. (December, 2019 – to date)
  - Director/Centre Chairman (UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM) (March, 2018 – to date)
  - Senior Lecturer (Grade II) (September, 2010 – December, 2019)
  - Senior Lecturer (Contract) (February, 2010 – August, 2010)
- Specialist Researcher cum Adjunct Lecturer cum ADB RETA 7276/Team Member (December 2007 – December 2009).
  - International Centre for Water Hazard and Risk Management (UNESCO-ICHARM) under the auspices of UNESCO, Public Works Research Institute (PWRI), Japan.
  - Disaster Management Policy Program (Masters Program at ICHARM), the National Graduate Institute for Policy Studies (GRIPS), Tokyo.
  - Asian Development Bank (ADB) Regional Technical Assistance (RETA) 7276: Supporting Investment in Water-Related Disaster Management (targeting Lower Mekong, Indonesia, Bangladesh, India).
- Japan Society for the Promotion of Science (JSPS) Postdoctoral Research Fellow (April, 2006 – November, 2007).
  - Ecological Engineering Laboratory, Department of Environmental Science & Technology, Saitama University, Japan.
- Invited Researcher at Ecological Engineering Laboratory, Saitama University cum WQ Testing/Sampling Engineer (October, 2005 – March, 2006)
  - Ecological Engineering Lab, Department of Environmental Science & Technology, Saitama University, Japan.
  - Environmental Testing Centre Ltd., Omiya City, Japan.
- Planning Engineer for Jan De Nul (Belgian company) (January 2001 – September 2002)
  - Planning & Production Unit, TOA-JAN DE NUL Joint Venture, Ubin & Tekon Island Recl. Project, Singapore (Over 1.0 bil. US$, 6-year project).
- Research Engineer (December 1999 – December 2000)
  - High Performance Concrete Research Laboratory (HPCRL), International Water Infrastructure Program (WIP), Department of Civil Engineering, National University of Singapore (NUS), Singapore (funding over 20 million SG$; 2-year project).

10.1 MAJOR RESPONSIBILITIES HELD

- Professor in Civil Engineering (University of Moratuwa, Sri Lanka) – Provision of effective teaching, related administration duties and the promotion and engaging in research and scholastic activities appropriate to the effective performance of my academic duties including lecturing, tutoring, examining, and laboratory supervision. Routinely give academic supervision and instruction, carry out examination work, and perform administrative tasks and other duties. While rendering my full-time services to University of Moratuwa, Sri Lanka as a lecturer in Hydraulic Engineering, I am also involved in tutoring students at several other higher educational institutes in Sri Lanka such as General Sir John Kotelawala Defence University (KDU), in the past at International College of Business and Technology (ICBT), South Asian Institute of Technology and Management (SAITM) and presently taking part in various consultancy activities through Uni-Consultancy Services (UNIC, University of Moratuwa) and in my individual capacity (over and above my normal work-load at the University of Moratuwa).
- Director – UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM), March 2018 to date.
- Course Coordinator/Selections Panel member (Local/International) for the M. Eng./ P.G. Diploma in Water Resources Engineering and Management, UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM) which is the first-ever fulltime International Masters program in the Sri Lankan university system, Department of Civil Engineering, University of Moratuwa (2012 – to date)
- Departmental Coordinator for the Construction Phase of UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM) funded by South Asia Foundation (SAF), India (2010 – 2013)
- Departmental Coordinator/Committee Member for the Washington Accord (International Engineering Alliance), Institution of Civil Engineers (ICE/Engineering Council -UK), and The Institution of Engineers Sri Lanka (IESL) accreditation procedures for the B.Sc. Engineering (Hons.) Degree (2010 – to date)
- Member/ Departmental Development Committee, Department of Civil Engineering, University of Moratuwa (2011 – to date)
- Member/ Undergraduate Curriculum Development Committee, Department of Civil Engineering, University of Moratuwa (2011 – to date)
- Representative Member of the IESL (Institution of Engineers, Sri Lanka) Civil Engineering Sub Committee for the new course curriculum development activities of the IESL Engineering Course (2011 – 2012)
- Specialist Researcher (UNESCO-ICHARM) – Major responsibilities included further improving a large scale watershed model targeting basin-wide hydrologic & material cycle modelling for Integrated Water Resources Management (IWRM), research on inundation modelling and disaster risk reduction, field experimentation, data collection and evaluation of land-use effects on river water quality, GIS applications in water management etc. In addition, I served as a resource person for various ADB, JICA and World Bank/UNESCO funded training programs hosted by ICHARM, including Flood Hazard Mapping Training, Comprehensive Tsunami Disaster Prevention Training and Local Emergency Operation Plan with Flood Hazard Map Training. It was a challenge to take part in training programs for the

senior executives and trainers who have extensive field experience in their disciplines, mainly high ranking government officials with long term civil engineering and administrative backgrounds. I visited China, Korea, Australia and Singapore, representing ICHARM at various occasions and participating in research seminars as a presenter and resource person.

- Adjunct Lecturer (National Graduate Institute for Policy Studies (GRIPS), Tokyo, attached to the Graduate Disaster Management Policy Program, the Masters program at the International Centre for Water Hazard and Risk Management (UNESCO-ICHARM, Japan), teaching subjects and conducting practical classes to the international postgraduates, many of whom were senior and mid-career level engineers holding reputable managerial and administrative posts at various Civil Engineering related governmental organizations, especially from East- and South-Asian, African and South American countries. The main areas of research guidance included hydrology, watershed planning and management, advanced computer programming (FORTRAN/Visual Basic), watershed, water quality and quantity modelling, disaster mitigation and planning etc. In addition, I organized numerous field visits for students and also supervised the Master's research works of three students, two from Bangladesh and another from China, focusing on issues related to ungauged river basin management, flood and inundation modelling and water quality degradation.
- Post-doctoral Research Fellow (Japan Society for the Promotion of Science –JSPS, Ecological Engineering Lab, Department of Environmental Science & Technology, Saitama University, Japan) - The research focus was on the "Use of Biological Methods for Sustainable Management and Restoration of Wetland and Lake Ecosystems". In addition, field experimentation and laboratory tests were undertaken to study the effects of spates of different magnitudes on aquatic vegetations on a sandbar of a frequently disturbed river in Japan and fine sediment retention as affected by annual shoot collapse to understand the role of plants as ecosystem engineers in lowland streams. Main duties included management of funds and laboratory facilities, coordination of external authorities for scheduling field experiments and lab tests, guiding and tutoring undergrad/postgraduate students, etc.
- Senior Lecturer conducting practicals, experiments, research projects for postgraduate students, Project Supervisor of Research Projects for undergraduate students, performing administration duties and projects assigned by the department; participating in various committees and administrative assignments; participating in faculty development programmes, etc.
- Co-ordinator, EXMO2010 Faculty-wide University Exhibition, Hydraulic and Water Resources Engineering Division, University of Moratuwa.
- Overall coordinator from the Ecological Engineering Division, Saitama University, Japan, for the research collaboration with The University of Newcastle & University of Canberra, Australia. Overall planning for research, logistic and funding arrangements, monitoring progress, extensive field visits for data collection and field verification at sites in Australia and Japan for the Lake Ecology and Wetland Management Program (2002 – 2007; ~60.0 Mil. JPY).

10.2 OTHER RESPONSIBLE EXPERIENCE

- Moderator & Marking Examiner (Representing Hydraulics/Fluid Mechanics groups), Institution Engineers Sri Lanka and City & Guilds (2010-2013).
- Coordinator, Exhibition Committee, Hydraulic Division, Department of Civil Engineering, University of Moratuwa (2010)
- Organizing Committee Member of Sri Lanka Students' Association in Japan (SLSAJ) Annual Research Session/Publication (2002-2007)
- Executive Committee - Sri Lanka Students' Association in Japan (1997/99 & 2002/05)
- Organizing Committee Member for SLSAJ Tsunami Fund Raising (Raised 2.5M Rs.) (2004)
- President, Civil Engineering Society - University of Moratuwa (1995/96)

11.0 CONSULTANCY WORK UNDERTAKEN (PAST 5 YEARS):

1). Project Name	Consultancy Services for Environmental Impact Assessment (EIA) for the Rehabilitation and Augmentation of Embilipitiya Paper Mill		
Project Country	Sri Lanka	Duration	2020 January – to date
Employer	University of Moratuwa/UNIC, Department of Chemical Engineering		
Source of fund	KSPA Embilipitiya Paper Mills (Pvt) Ltd.		
Position Held	Senior Hydrologist		
Responsibilities/ Assignments performed	Hydrological assessment, Identification of existing condition of the drainage system and measures for rehabilitation/redesign, Preparation of Drainage Management Master Plan, Hydrological design of Channels and outlets, Design of rainwater harvesting system, drainage discharge/irrigation system with further recommendations		

2). Project Name	Consultancy Services for Conducting Detailed Investigations for Establishing Flood Mitigation Measures in Addu City, Maldives		
Project Country	Maldives	Duration	2019 October – to date
Employer	Ministry of Environment and Energy, Republic of Maldives, Epoch Consultants Pvt Ltd, Maldives and LHI, Sri Lanka		
Source of fund	Maldivian Government and Addu City Council		
Position Held	Team Leader/Senior Hydrologist		
Responsibilities/ Assignments performed	Hydrological assessment, Estimation of Peak Discharge locations and volumes, Identification of retention/detention & existing/required study, Hydrological design of Channels and outlets, Design and installation of Groundwater recharge pits with further recommendations		

3). Project Name	Consultancy Services for Groundwater Resource Management and Aquifer Protection in Maldives (GCF Project): Baseline Assessment for Groundwater Resource Management and Aquifer Protection in Maldives

Project Country	Maldives	Duration	2019 October – to date
Employer	Ministry of Environment and Energy, Republic of Maldives, Water Solutions Consultants Pvt Ltd, Maldives and LHI, Sri Lanka		
Source of fund	UNDP Funded Green Climate Project		
Position Held	Team Leader/Senior Hydrologist		
Responsibilities/ Assignments performed	Undertake baseline assessment to establish the current status and catchment characterization, Develop Groundwater resources management plan for improved aquifer recharge and protection with clear action plan, Development a Groundwater monitoring framework with monitoring protocols, institutional roles and responsibilities for its implementation with on the job training and technology transfer component, Make relevant recommendations.		

4). Project Name	Feasibility Study to Reduce the Traffic Delay on Peliyagoda-Puttalam (A003) Road within Kochchikade Town Area		
Project Country	Sri Lanka	Duration	2019 April – to date
Employer	EML Consultants		
Source of fund	Road Development Authority		
Position Held	Senior Hydrologist		
Responsibilities/ Assignments performed	Hydrological assessment, Estimation of Peak Discharge locations and volumes, Identification of retention/detention & existing/required study, Hydrological design of Channels and outlets, Design and installation of Groundwater recharge pits with further recommendations		

5). Project Name	Preparation of Detailed Design for proposed Salinity Barrier at Ambathale in Kelani River		
Project Country	Sri Lanka	Duration	2019 August – to date
Employer	Climate Resilience Improvement Project (CRIP)		
Source of fund	The Ministry of Agriculture, livestock Development, Irrigation and Fisheries and Aquatic Resource Development		
Position Held	Team Leader cum Senior Hydrologist/Modeller		
Responsibilities/ Assignments performed	Hydrological assessment, Estimation of Peak Discharge and design of alternative gate types, High flow/ Low flow studies for operational conditions, Flow level modelling, Sedimentation erosion studies, Head loss modelling using CFD, Overall Water Resources assessment.		

6). Project Name	Hydrological Study for Identification of Flood Impact due to Proposed Weir Site at Bambakiriella Intake		
Project Country	Sri Lanka	Duration	2019 March – 2019 August
Employer	Central Engineering Consultancy Bureau (CECB)		
Source of fund	National Water Supply and Drainage Board (NWSDB)		
Position Held	Hydrologist		

Responsibilities/ Assignments performed	Design of submerged weir and water intake for Greater Matale Water Supply Scheme (Rattota intake across Maha Oya), Evaluating alternative locations and designs based on field data and hydrological analyses to identify the feasibility and environmental impacts of the proposed weir and intake, Identifying the feasibility of the proposed weir and extraction rates based on peak flows for flood analysis and low flows for environmental flow analysis, Flood analysis based on 1-D/2-D/3-D hydrologic/ hydraulic modelling, Introducing migratory measures or design/construction alternatives to minimise impacts due to wire/ intake. Weir design for flood mitigation.

7). Project Name	Feasibility Study & EIA for the Proposed Mahaweli Left Bank Lower Basin Development Project (Kinniya & Kantale Areas) with Rs.6, 250 Million		
Project Country	Sri Lanka	Duration	2018 February – 2018 December
Employer	Irrigation Department/EML Consultants		
Source of fund	World Bank (WB)		
Position Held	Senior Hydrologist		
Responsibilities/ Assignments performed	Hydrological assessment, Estimation of Water Resources, Design Peak Discharge locations and volumes, Reservoir operational study & Irrigation demand study, Review of hydrological designs of spillway/primary & sub-canal system, Catchment protection measures.		

8). Project Name	Preparation of Master Plan for the Yala (Palatupana) Wild Tourism Zone		
Project Country	Sri Lanka	Duration	2018 March – 2018 October
Employer	Ministry of Tourism Development and Christian Religious Affairs		
Source of fund	Tourism Development Authority		
Position Held	Hydrologist/Civil Engineer		
Responsibilities/ Assignments performed	Preparation of a Master Plan for the Yala Tourism Development Zone, targeting Signature Wildlife Tourism Zone conserving serenity of the wilderness and promoting project area as a leading tourism attraction in Asia. Addressing hydrological, drainage and sustainability Concerns for the project development and operation.		

9). Project Name	Feasibility Study for New Access Roads from Kottawa to Tech-City Project in Mahenwatta		
Project Country	Sri Lanka	Duration	2018 September – 2019 August
Employer	Central Engineering Consultancy Burau (CECB)		
Source of fund	Ministry of Megapolis & Western Development/RDA		
Position Held	Hydrologist		

Responsibilities/ Assignments performed	Evaluating alternative traces and design proposals based on field data and hydrological analyses to identify the existing drainage patterns and flow connectivity, Identifying the feasibility of the proposed alternatives and evaluate hydrological impacts due to proposed project activities, Introducing migratory measures or Design/construction alternatives to avoid/minimise impacts.

10). Project Na	Hydrological Assessments for the Rehabilitation Ethiliwewa Tank in Telulla, Moneragala		
Project Country	Sri Lanka	Duration	2018 August – 2019 January
Employer	Agrarian Services Department		
Source of fund	The Ministry of Agriculture, livestock Development, Irrigation and Fisheries and Aquatic Resources Development		
Position Held	Senior Hydrologist		
Responsibilities/ Assignments performed	Hydrological assessment, Estimation of Peak Discharge locations and volumes, Reservoir operational study & Irrigation demand study, Hydrological design of spillway/primary, Water Resources assessment		

11). Project Name	Preparation of Master Plan for Storm Water Drainage System of Jaffna City and Preparation of Priority Investment Plan		
Project Country	Sri Lanka	Duration	2018 August – Ongoing
Employer	EML Consultants/ Ministry of Megapolis & Western Development		
Source of fund	World Bank Funded Strategic Cities Development Project		
Position Held	Hydrologist		
Responsibilities/ Assignments performed	Hydrological modelling and assessment, Estimation of Peak Discharge locations and volumes, Interaction with groundwater hydrology and Tidal Dynamics of the lagoon environs, Hydrological design of associated infrastructure and sub-canal system		

12). Project Name	Hydrological Study for Identification of Flood Impact due to Proposed Weir Site at Bambakiriella Intake Consultancy Services for Designing of a Weir for the Polgahawela, Pothuhera and Alawwa Integrated Water Supply Project		
Project Country	Sri Lanka	Duration	2018 May – 2019 August
Employer	VA TECH WABAG Limited, India		
Source of fund	National Water Supply and Drainage Board (NWSDB)		
Position Held	Senior Hydrologist		

Responsibilities/ Assignments performed	Design of 100-m submerged weir for Polgahawela Intake, Evaluating alternative locations and design proposals based on field data and hydrological analyses to identify the feasibility and environmental impacts of the proposed weir and intake, Identifying the feasibility of the proposed weir and extraction rates based on peak flows for flood analysis and low flows for environmental flow analysis, Flood analysis based on 1-D/2-D/3-D hydrologic/ hydraulic modelling, Introducing mitigatory measures or design/construction alternatives to avoid/minimise impacts due to wire/ intake. Weir design for flood mitigation.

13). Project Name	Preparation of Master Plan for the Developments and Conservation of Negombo Lagoon and Surrounding Environments		
Project Country	Sri Lanka	Duration	2018 June – Ongoing
Employer	Faculty of Architecture Project Consultancy Unit		
Source of fund	The Ministry of Finance/ Ministry Of Fisheries and Aquatic Resources Development		
Position Held	Hydrologist/Hydrological Modeller		
Responsibilities/ Assignments performed	Hydrological modelling and assessment of coastal floodplains, Estimation of Peak Discharge locations and volumes, Interaction with groundwater hydrology and tidal dynamics of the lagoon environs, Hydrological design of associated infrastructure and sub-canal system, Inputs for the IEE Report, Negombo Lagoon Master Plan and Formulation and Design of Strategic Action Projects.		

14). Project Name	Consultancy Services for Identifying Possible Impacts of Colombo Port City Land Reclamation on Groundwater Hydrogeology in Metro-Colombo Area		
Project Country	Sri Lanka	Duration	2018 May – 2019 March
Employer	China Harbor Engineering Company Ltd		
Source of fund	China Harbor Engineering Company Ltd.		
Position Held	Team Leader/Senior Groundwater Hydrologist/Modller		
Responsibilities/ Assignments performed	Phase I : Literature Support and Initial Recommendations Phase II : 2-D and 3-D Groundwater Modelling for Long-term Impact Analysis; Phase III : Verification of Model Results, Analysis of Field Data and Recommendations		

15). Project Name	Initial Environmental Examination Report (IEE) for The Proposed Towns East Polonnaruwa Water Supply Project		
Project Country	Sri Lanka	Duration	2018 May – 2018 August
Employer	China Harbor Engineering Company Ltd		
Source of fund	National Water Supply and Drainage Board (NWSDB)		
Position Held	Hydrologist		

Responsibilities/ Assignments performed	Evaluating alternative locations and design proposals based on field data and hydrological analyses to identify the feasibility and environmental impacts of the proposed intake, Identifying the feasibility of the proposed weir and extraction rates based on peak flows for flood analysis and low flows for environmental flow analysis, Introducing mitigatory measures or design/construction Alternatives to avoid/minimise impacts due to weir/ intake.

16). Project Name	Hydrological Consultancy Service for Metro Colombo Solid Waste Management Project (MCSWMP)		
Project Country	Sri Lanka	Duration	2018 January – 2019 January
Employer	China Harbor Engineering Company Ltd		
Source of fund	China Harbor Engineering Company Ltd.		
Position Held	Team Leader/Senior Groundwater Hydrologist/Modller		
Responsibilities/ Assignments performed	Hydrological Studies for the Kelaniya Transfer Station (KTS) and Drainage and Hydrogeological Study Report for Aruwakkalu Transfer Station (ATS) and Aruwakkalu Sanitary Landfill (ASL) including Groundwater Modelling for Long- term Impact Analysis, Verification of Model Results, Analysis of Field Data and Recommendations		

17). Project Name	Feasibility Study for Marine Drive Extension from Dehiwala Station Road to Panadura		
Project Country	Sri Lanka	Duration	2017 June – 2018 June
Employer	EML Consultants/ Road Development Authority		
Source of fund	Road Development Authority (RDA)		
Position Held	Hydrologist		
Responsibilities/ Assignments performed	Data collection and conducting a detailed hydrologic study on the existing drainage patterns and flow connectivity to identify the feasibility of the proposed alternatives and evaluate hydrological impacts due to proposed project activities, Introducing mitigatory measures or Design/construction alternatives to minimise impacts.		

18). Project Name	EIA Study for the Rehabilitation of Medirigiriya – Kantalei Road through a Wild Life Protected Area proposed to be developed under the Moragahakanda - Kaluganga Development Project		
Project Country	Sri Lanka	Duration	2017 August – 2018 August
Employer	EML Consultants/ Road Development Authority		
Source of fund	Road Development Authority (RDA)		
Position Held	Team Leader/Senior Hydrologist		
Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain Modelling for impact assessment, Estimation of peak discharge locations and volumes, detailed drainage design Hydrological design of culverts/bridges/cross- & toe drains		

19). Project Name	Climate Resilience Improvement Project (CRIP) – Proposed Bridge at Thalwila Estuary on Nainamadama Iranawila – Chilaw (B640) Road		
Project Country	Sri Lanka	Duration	2018 January – 2019 January
Employer	Master Hellie's Engineering Consultants Pvt. LTD.		
Source of fund	Road Development Authority (RDA)		
Position Held	Senior Hydrologist		
Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, Estuaribne and coastal floodplain analysis, detailed drainage design, Hydrological design of culverts/bridges/cross- & toe drains		

20). Project Name	Climate Resilience Improvement Project (CRIP) – Proposed Bridge at Thalwila Estuary on Nainamadama Iranawila – Chilaw (B640) Road		
Project Country	Sri Lanka	Duration	2017 March – 2017 July
Employer	Master Hellie's Engineering Consultants Pvt. LTD.		
Source of fund	Road Development Authority (RDA)		
Position Held	Senior Hydrologist		
Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, detailed drainage design, Hydrological design of culverts/bridges/cross- & toe drains		

21). Project Name	Climate Resilience Improvement Project (CRIP) - Proposed Bridge at Proposed Bridge after Udappuwa Town on Batthulu Oya-Udappuwa-Andimuni Road (B614)		
Project Country	Sri Lanka	Duration	2018 January – 2019 January
Employer	EML Consultants Ltd.		
Source of fund	Road Development Authority (RDA)		
Position Held	Senior Hydrologist		
Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, Coastal floodplain and estuarine analysis, detailed drainage design, Hydrological design of culverts/bridges/cross- & toe drains		

22). Project Name	Climate Resilience Improvement Project (CRIP) - Proposed Bridge at Proposed Bridge after Udappuwa Town on Batthulu Oya-Udappuwa-Andimuni Road (B614)		
Project Country	Sri Lanka	Duration	2016 August – Ongoing
Employer	Ministry of Fisheries & Aquatic Resources Development		

Source of fund	Ministry of Fisheries and Aquatic Resources Development Sri Lanka (ADB/World Bank Funded)
Position Held	Hydrologist
Responsibilities/ Assignments performed	Hydrological assessment, Estimation of Peak Discharge locations and volumes, Hydrology and Tidal Dynamics of the lagoon environs, Hydrological design of Associated infrastructure & sub-canal system

23). Project Name	Consultancy Services for the Construction of weir across Deduruoya for Greater Kurunegala Water Supply and Sewerage Proiect		
Project Country	Sri Lanka	Duration	2015 November – 2016 October
Employer	Central Engineering Consultancy Burau (CECB)		
Source of fund	National Water Supply and Drainage Board (NWSDB)		
Position Held	Hydrologist		
Responsibilities/ Assignments performed	Evaluating alternative locations and design proposals based on field data and hydrological analyses to identify the feasibility and environmental impacts of the proposed weir and intake, Identifying the feasibility of the proposed weir and extraction rates based on peak flows for flood analysis and low flows for environmental flow analysis, Flood analysis based on 1-D/2-D/3-D hydrologic/hydraulic modelling, Introducing mitigatory measures or design/construction alternatives to minimise impacts due to120-m wier/intake. Weir design for flood mitigation.		

24). Project Name	Master Plan Development for the Ceylon Petroleum Storage Terminals LTD, Sri Lanka; Improvement of Storm Water Drainage and Development of Drainage Plans		
Project Country	Sri Lanka	Duration	2015 October – 2016 October.
Employer	Project Management Unit (PMU), TCP-Uni. of Moratuwa.		
Source of fund	Ceylon Petroleum Storage Terminals LTD. (CPSTL)		
Position Held	Senior Hydrologist/Civil Engineer		
Responsibilities/ Assignments performed	Designing a Storm Water Management Project for the premises and the surrounding zones (146 acre area) and preparing a Drainage Master Plan.		
25). Project Name	Consulting Services for conducting Initial Environment Examination (IEE) for Construction of Diversion Tunnels & Micro Tunnels with Appurtenant Structures, Metro Colombo Urban Development Project		
Project Country	Sri Lanka	Duration	2015 March – 2016 January
Employer	Master Hellie's Engineering Consultants Pvt. LTD. and SLLRDC		
Source of fund	World Bank & Colombo Municipal Council (CMC)		
Position Held	Senior Hydrologist		

Responsibilities/ Assignments performed	Data Collection on existing maximum flow and peak floods, Hydrological assessment targeting tunnelling work in proposed Mutwal/Torrington Tunnel Traces, Drainage/ Hydrological assessment and floodplain modelling especially for tunnelling work in hill slopes, Identification of tunnelling impacts on hydrology and drainage and proposing mitigatory measures. Detailed drainage design, dewatering/diversion guidelines, Hydrological design of culverts/bridges/cross- & toe drains for access roads and hill slopes.

26). Project Name	Integrated Road Investment Project of the Southern Province (iRoads- Southern/Package G1, M2 & M3: 180 kms)		
Project Country	Sri Lanka	Duration	2015 February – 2016 February
Employer	KD Ebert and Sons Holdings Pvt. LTD.		
Source of fund	Road Development Authority (RDA)		
Position Held	Senior Hydrologist		
Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, detailed drainage design, Hydrological design of culverts/bridges/cross- & toe drains		

27). Project Name	Hydrological Study On Implications On Peradeniya Badulla - Chenkaladi Road (A005 Road), Section From Badulla To Chenkaladi (From 132.20 Km To 277.80 Km		
Project Country	Sri Lanka	Duration	2015 March – 2015 August
Employer	Master Hellie's Engineering Consultants Pvt. LTD.		
Source of fund	Road development Authority (RDA)		
Position Held	Senior Hydrologist		
Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, detailed drainage design, Hydrological design of culverts/bridges/cross- & toe drains		

28). Project Name	University of Sri Jayawardenapura (USJ) Township Development Programme; Improvement of Storm Water Drainage and Development of Drainage Master Plan		
Project Country	Sri Lanka	Duration	2015 January – 2015 May
Employer	Master Hellie's Engineering Consultants Pvt. LTD.		
Source of fund	University of Sri Jayewardenepura		
Position Held	Senior Hydrologist/Civil Engineer		
Responsibilities/ Assignments performed	Designing a Storm Water Management Project for the university and the surrounding zones identified by the Township Master Plan and assist the university to implement the project, while taking note of the work carried out by local authorities as well as the Sri Lanka Land Reclamation and Development Corporation (SLLRDC) and preparing a Drainage Master Plan.		

29). Project Name	Refurbishment of Gaffoor Building at Fort (Rs.1.8 Billion Project)		
Project Country	Sri Lanka	Duration	2015 January – 2015 May
Employer	Uni-Consultancy Services (UNIC)-University of Moratuwa		
Source of fund	Urban Development Authority (UDA)/GOSL		
Position Held	Water Proofing/Stormwater Drainage Specialist/Consultant		
Responsibilities/ Assignments performed	Recommendations and technical specification for waterproofing of the basement (BOQ Val. of Rs. 22.6 Million), Preparation of specifications and guidelines for the use of crystallization admixture type water proofing for the proposed basement wall-/slab-concrete, for the use of hydrophilic rubber waterstops along all vertical and horizontal construction joints and for applying two coats of cementitious waterproofing material coating, Preparation of Contract Documents and BOQs, Preparation of guidelines for Testing, Certification, Guarantee, Mode of measurement and Cost estimates; Estimates for roof runoff		

30). Project Name	Environmental Impact Study for the proposed Industrial Zone adjacent to the Magam Ruhunupura Mahinda Rajapaksha (MRMR) Port at Hambantota		
Project Country	Sri Lanka	Duration	2013 November – 2014 October
Employer	Uni-Consultancy Services (UNIC)-University of Moratuwa		
Source of fund	Sri Lanka Ports Authority (SLPA)		
Position Held	Senior Hydrologist		
Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, Addressing impacts to the coastal floodplain, detailed drainage design, Hydrological design of culverts/bridges/cross- & toe drains		

31). Project Name	Inter Divisional Rural and Small Township Development Initiative for North and East Provinces - Preparation of Master Plan for Storm Water Drainage System for Batticaloa Township Area		
Project Country	Sri Lanka	Duration	2013 November – 2014 November
Employer	EML Consultants Ltd.		
Source of fund	Economic Development Ministry/World Bank		
Position Held	Team Leader cum Senior Hydrologist		
Responsibilities/ Assignments performed	Preparing Project Proposals and Recommendations for Flood Management and Overall Development Program, extensive field data collection procedures, hydrologic measurements, hydraulic/ hydrologic modelling and scenario analyses for flood protection.		

32). Project Name	Vital Connectivity Improvement of Puttalam and Kurunegala Districts by Construction of Two Lane Bridge across Daduru Oya at Kadigawa with Access Roads from Ujekale (0+000) and Kadigawa Junctions (3+180)

Project Country	Sri Lanka	Duration	2013 August – 2013 October
Employer	Valence Engineering Services (Pvt.) Ltd		
Source of fund	Road Development Authority (RDA)		
Position Held	Senior Hydrologist/Hydrological Modeller		
Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, detailed drainage design, Hydrological design of culverts/bridges/cross- & toe drains		

33). Project Name	FDK BOI Project, Katunayake (Rs. 6.4 Million Project)		
Project Country	Sri Lanka	Duration	2013 October – 2014 May
Employer	FDK LANKA (Pvt.) Ltd., BOI Processing Zone, FTZ		
Source of fund	FDK LANKA (Pvt.) Ltd.		
Position Held	Waterproofing Retrofication Specialist/Consultant		
Responsibilities/ Assignments performed	Recommendation for Waterproofing Retrofication in 1st Factory Building and Storage Facility, Technical assistance including Condition evaluation, Leakage investigations, Seepage damage assessment, Specification development, Detail drawings, Detailed report to the client, Repair, Sheet Metal Flashing and Waterproofing retrofication recommendations.		

34). Project Name	World Bank Assisted Strategic Cities Development Project Environmental Screening Report (SCDPE) for Galle and Kandy Cities – Environmental Screening and Project Appraisal Report		
Project Country	Sri Lanka	Duration	2013 August – 2014 January
Employer	Uni-Consultancy Services (UNIC)-University of Moratuwa		
Source of fund	Ministry of Defence and Urban Development / World Bank		
Position Held	Hydrologist cum Geotechnical/Civil Engineer		
Responsibilities/ Assignments performed	Environmental screening for proposed developments for Flooding & drainage issues, Canal & lake water quality issues, Traffic congestion issues, Poor public convenience, Threat to important ecosystems, Data collection and hydrologic, flow and flood/inundation analyses, Detailed report to the client		

35). Project Name	Southern Highway Extension Project (Godagama – Andarwewa Section)		
Project Country	Sri Lanka	Duration	2013 August – 2014 December
Employer	Uni-Consultancy Services (UNIC)-University of Moratuwa		
Source of fund	Road Development Authority (RDA)		
Position Held	Team Leader cum Senior Hydrologist		

Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, detailed drainage design, Hydrological design of culverts/bridges/cross- & toe drains

36). Project Name	Economic Feasibility Study and Environmental Impact Assessment for Proposed Kelani Valley Rail Line Extension (Horana to Hambantota)		
Project Country	Sri Lanka	Duration	2012 November – 2013 December
Employer	Transportation Engineering Division, Department		
Source of fund	Ministry of Highways and Transport		
Position Held	Hydrologist/Member of EIA Team		
Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, Hydrological designs for alternative routes		

37). Project Name	Environmental Impact Assessment (EIA) Study of the Proposed Hantana Ecotel Hotel, Kandy		
Project Country	Sri Lanka	Duration	2013 March – 2013 December
Employer	Ecotel (Pvt) Ltd, India		
Source of fund	Ecotel (Pvt) Ltd, India		
Position Held	Senior Hydrologist/Hydrological Modeller		
Responsibilities/ Assignments	Drainage/ Hydrological assessment, Detailed drainage design/ Hydrological design of structures for flood protection		

38). Project Name	Preliminary Hydrological Analyses and Data Collection Surveys for Primary Bridges on National Roads for Recommending Maintenance System of Bridges (46 Selected Bridges)		
Project Country	Sri Lanka	Duration	2013 February – 2013 May
Employer	Master Hellie's Engineering Consultants Pvt. LTD.		
Source of fund	Japan International Cooperation Agency (JICA), Japan Bridge and Structural Institute (JBSI) & Road Development Authority (RDA)		
Position Held	Senior Hydrologist/Hydrological Modeller		
Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, detailed drainage design, Hydrological design of culverts/bridges/cross- & toe drains		

39). Project Name	Environmental Impact Assessment (EIA) Study of the Proposed Grand Palace 200 Roomed 5 Star Hotel (Project Cost: Rs. 2.2 Bil.),

	Gurudeniya, Kandy		
Project Country	Sri Lanka	Duration	2013 June – 2013 December
Employer	Yoshida Sha (Pvt) Ltd, Japan		
Source of fund	Yoshida Sha (Pvt) Ltd		
Position Held	Senior Hydrologist/Hydrological Modeller		
Responsibilities/ Assignments performed	Drainage/ Hydrological assessment, Detailed drainage design/ Hydrological design of structures for flood protection		

40). Project Name	Master Plan for The Physical Developments of the Eastern University of Sri Lanka		
Project Country	Sri Lanka	Duration	2012 August – 2013 March
Employer	Uni-Consultancy Services (UNIC)-University of Moratuwa		
Source of fund	South Eastern University		
Position Held	Hydrologist/Hydrological Modeller		
Responsibilities/ Assignments performed	Preparing Project Proposals for Flood Management and Overall Development Program, extensive field data collection procedures, hydrologic measurements, hydraulic/ hydrologic modelling and scenario analyses for flood protection		

41). Project Name	World Bank Assisted Metro Colombo Urban Development Project (MCUDP) - Environmental Screening and Project Appraisal Report		
Project Country	Sri Lanka	Duration	2011 December - 2012 January
Employer	Uni-Consultancy Services (UNIC)-University of Moratuwa		
Source of fund	Colombo Municipal Council (CMC)/ World Bank		
Position Held	Hydrologist cum Geotechnical/Civil Engineer		
Responsibilities/ Assignments performed	Environmental screening for proposed developments for Flooding & drainage issues, Canal & lake water quality issues, Traffic congestion issues, Poor public convenience, Threat to important ecosystems, Data collection and hydrologic, flow and flood/inundation analyses, Detailed report to the client		

42). Project Name	Hydrological Study: Rehabilitation of 25 km stretch of Mankulam – Vellamkulam Road (B269)		
Project Country	Sri Lanka	Duration	2012 February – 2012 December
Employer	Master Hellie's Engineering Consultants Pvt. LTD.		
Source of fund	Rani Infrastructure Development Ltd./ADB		
Position Held	Hydrologist		
Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, detailed drainage design, Hydrological design of culverts/bridges/cross- & toe drains		

43). Project Name	Sri Lanka Conflict Affected Region Emergency(CARE) Project: Preliminary Hydrological ASSESSMENTS FOR the Rehabilitation of Semmanikulam and other 14 Small/Medium Sized Irrigation Tanks in North & East		
Project Country	Sri Lanka	Duration	2011 December – 2012 August
Employer	Irrigation Department		
Source of fund	Ministry of Economic Development (ADB/JICA Funded)		
Position Held	Hydrologist		
Responsibilities/ Assignments performed	Hydrological assessment, Estimation of Peak Discharge locations and volumes, Reservoir operational study & Irrigation demand study, Hydrological design of spillway/primary & sub-canal system		

44). Project Name	Hydrological Study: Rehabilitation of 37 km stretch of Paranthan – Pooneryn Road (B357)		
Project Country	Sri Lanka	Duration	2012 January – 2012 August
Employer	Master Hellie's Engineering Consultants Pvt. LTD.		
Source of fund	China Harbour Engineering Company Ltd.		
Position Held	Hydrologist		
Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, detailed drainage design, Hydrological design of culverts/bridges/cross- & toe drains		

45). Project Name	Auro Resorts (Tangalle) Pvt Ltd, Kahandamodera, Ranna, angalle (124 Rooms) & Proposed Four Star Hotel at Palana, Weligama		
Project Country	Sri Lanka	Duration	2011 December
Employer	Work Team		
Source of fund	Auro Resorts (Tangalle) Pvt Ltd/Weligama Hotel Pvt. Ltd.		
Position Held	Hydrologist		
Responsibilities/ Assignments performed	Preliminary assessment of hydrological issues, Environmental status report, Field reconnaissance, field Measurements and preliminary situation assessment, Flow & flood/inundation analyses.		

46). Project Name	Initial Environmental Examination (IEE) Study for the Proposed Sites to Develop Inland Container Depots (ICDS) Under ADB Funded Multimodal Transport Project – Hydrological Study Part		
Project Country	Sri Lanka	Duration	2011 November
Employer	EML Consultants (Pvt) Ltd.		
Source of fund	Asian Development Bank (ADB)		
Position Held	Hydrologist		

Responsibilities/ Assignments performed	Environmental status report and a preliminary assessment, Field Reconnaissance, measurements and preliminary situation assessment, Flow & flood/inundation analyses.

47). Project Name	Development Proposal for the South Eastern University – Technical Study/Hydrological Study Part		
Project Country	Sri Lanka	Duration	2011 August – 2012 March
Employer	Uni-Consultancy Services (UNIC)-University of Moratuwa		
Source of fund	South Eastern University		
Position Held	Hydrologist/Hydrological Modeller		
Responsibilities/ Assignments performed	Preparing Project Proposals for Flood Management and Overall Development Program, extensive field data collection procedures, hydrologic measurements, hydraulic/ hydrologic modelling and scenario analyses for flood protection.		

48). Project Name	Initial Environmental Examinations (IEE) for Ensalwatta I/II & Tea Factory (03 MiniHydro Projects), Deniyaya		
Project Country	Sri Lanka	Duration	2011 September – 2012 September
Employer	VFORM Consultants		
Source of fund	Free Lanka Power 3 Pvt. LTD.		
Position Held	Hydrologist		
Responsibilities/ Assignments performed	Environmental status report and preliminary assessment, Field Reconnaissance, measurements and preliminary situation assessment, Flow & flood/inundation analysis.		

49). Project Name	Hydrological Study: Rehabilitation of 122 km stretch of Puttlam – Mannar Road (B379, B403)		
Project Country	Sri Lanka	Duration	2011 November – 2013 January
Employer	Master Hellie's Engineering Consultants Pvt. LTD.		
Source of fund	China Harbor Engineering Company Ltd.		
Position Held	Hydrologist		
Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, detailed drainage design, Hydrological design of culverts/bridges/cross- & toe drains		

50). Project Name	Hydrological Study: Improvement & Rehabilitation of 27 km Length of Horana-Matugama-Horawala Road (B157)		
Project Country	Sri Lanka	Duration	2011 September – 2012 August
Employer	Master Hellie's Engineering Consultants Pvt. LTD.		
Source of fund	China Harbor Engineering Company Ltd.		
Position Held	Hydrologist		

Responsibilities/ Assignments performed	Data Collection on existing flow and flood regime, Drainage/ Hydrological assessment and floodplain modelling, Estimation of peak discharge locations and volumes, detailed drainage design, Hydrological design of culverts/bridges/cross- & toe drains

51). Project Name	Gampaha District Water Resources and Sustainable Development Program – Technical Study		
Project Country	Sri Lanka	Duration	2010 – 2011
Employer	Uni-Consultancy Services, University of Moratuwa		
Source of fund	China Harbour Engineering Company Ltd.		
Position Held	Hydrologist/Hydrological Modeller		
Responsibilities/ Assignments performed	Preparing Project Proposals for Flood Management and Overall Development Investments in Gampaha District which involves extensive field data collection procedures, sectoral need surveys, hydrologic measurements, hydraulic and hydrologic modelling and scenario analyses.		

52). Project Name	Feasibility for Augmentation of Buttala Monaragala Water Supply Scheme – Hydrological Study		
Project Country	Sri Lanka	Duration	2011 August
Employer	EML Consultants (Pvt) Ltd.		
Source of fund	Besix Sanotec, Belgium		
Position Held	Technical Reviewer/Consultant Hydrologist		
Responsibilities/ Assignments performed	Technical review of study methodology, Review of Hydrological studies/ data acquisition/ hydrologic modelling sequence, Overall assessment of project feasibility & technical/engineering recommendation.		

53). Project Name	Maha Oya (River) Restoration Project, Kochchikade, North Western Province, Sri Lanka ("Increasing the resilience of coastal and riverine communities to climate change and other threats by conserving the ecosystems of the Maha Oya and associated coastal wetlands in Sri Lanka")		
Project Country	Sri Lanka	Duration	2011 August
Employer	Environmental Foundation Consultants (Pvt) Ltd. (EFL)		
Source of fund	Mangroves for the Future Initiative (MFF) of the International Union for the Conservation Nature (IUCN)		
Position Held	Technical Advisor/Consultant Hydrologist		
Responsibilities/ Assignments performed	Technical review of study methodology, Review of Hydrological studies/ data acquisition/ hydrologic modelling sequence, Overall assessment of project feasibility & technical/engineering recommendation.		

54). Project Name	Environment Assessment for the Development of the Proposed Final Disposal Facilities at Monrovia Watta, Hikkaduwa/

	Keerikkulama, Anuradhapura & Malamulla, Panadura		
Project Country	Sri Lanka	Duration	2010 – 2011
Employer	Uni-Consultancy Services, University of Moratuwa		
Source of fund	PILISARU Project, Central Environmental Authority (CEA)		
Position Held	Hydrologist/Team Member		
Responsibilities/ Assignments performed	Technical assessment of site conditions/suitability and Issues, Surface runoff/run-on analyses, Flood/inundation modelling, Site drainage assessment & design, Technical report preparation.		

(1). Over 30 other overseas/local consultancy projects and EIA studies undertaken prior to 2011 and in between 2011~2018.

12.0 CONTRIBUTION TO RESEARCH

Attached to the Hydraulic and Water Resources Engineering Division, Department of Civil Engineering, University of Moratuwa, I am currently actively involved in academic research in the following main research areas:

- Hydrology; Watershed & Groundwater Management/Modelling; GIS tools in Watershed/Water Resources Management; Integrated Water Resources Management (IWRM); Erosion/Sedimentation Modelling, Issues on Regulated Rivers

Doctoral Degree (Ecological Engineering Laboratory, Saitama University)

- Field experimentation and modelling of growth and morphological traits of aquatic sedges and their adaptations to water depth: A comparative study and implications for river restoration and ecosystem management
- The core research comprised of collaboration with two Australian universities to monitor eco-physiological characteristics of temperate/Mediterranean wetlands, lake and river littoral ecosystems with special reference to species adaptations, followed by modelling (FORTRAN/VBA) of responsive adaptation of wetland species to water depth. Under the sub-themes of the main research envisaged, the role of emergent macrophytes in the nutrient cycling of wetlands (focus was on two wetlands in Goulburn and Albury, NSW, Australia) and interaction between the hydrous sediment layer and submerged macrophytes in Myall Lake, NSW, Australia were also investigated. The research outcomes were found to be useful in developing management implications for wetland littoral zone management as well as for river restoration projects in Japan and elsewhere.
- In addition to the research component, as the Core team leader of the 3-year project, I was responsible for the overall programme development, execution and compilation of results, covering extensive research exchanges among counterparts (Saitama University, Japan and University of Newcastle & University of Canberra, Australia), organizing of seminars, acquiring necessary permits and arranging all logistics and 16 field trips to Australia over the project duration.

Postgraduate Research (Ecological Engineering Laboratory, Saitama University)

- After completion of my PhD studies, I joined the Ecological Engineering Lab, Department of Environmental Science & Technology, Saitama University, Japan as an Invited Researcher and also served as a Water Quality Testing Engineer at the Environmental Testing Laboratories, Japan, my first working experience in highly target-oriented Japanese working environment. My exposure included research and modelling, field water quality sampling and laboratory testing and other teaching and academic tasks.

Master's Degree Research (Hydroscience and Geotech Eng. Lab, Saitama University)

- Groundwater Control and Mitigation of Land Subsidence during Drought Seasons by using Telemetry and Real-time Pumping Optimization in Saitama, Japan.
- The core research focused on the mitigation of land subsidence occurring as a result of unplanned extraction of groundwater from deep subsurface layers in Kanto (Tokyo) Basin during drought seasons. It involved extensive field data collection and monitoring procedures followed by the development of a subsurface flow model with existing pumping-well network and deployment of a telemeter network to monitor and determine water table fluctuations in real time. A parameterized land subsidence sub model was used to predict future subsidence by ground settlement. A dynamic time series modelling technique was introduced to accommodate more recent telemeter data into modelling procedures, and measured water level fluctuation, pumping and land subsidence data were fed into the main simulation-optimization model to determine optimal pumping rates at each sub-basing to adequately suppress future land subsidence. Based on the research conducted in collaboration with the Atmosphere and Water Management Bureau of Saitama Prefectural Government, a joint monitoring and management approach was proposed for the basin which had been identified as a critical subsidence prone region.

Following is the list of peer-reviewed publications published in both international and local journals and conferences.

12.1 Peer Reviewed/Refereed Journal Publications

Kamran, M., Yousaf, W., Rajapakse, R. L. H. L., Kareem Awan, W., Riaz, M., Asif, N. M., Umar, M., and Shah, U. T. (2020) Innovative initiative for effective operation and monitoring using HEC-RAS modelling of Hakra Branch Canal System, Pakistan. Irrig. and Drain., https://doi.org/10.1002/ird.2524.

Ponnamperuma, N. and L. Rajapakse, "Holistic Behaviour of Urban Pond Systems for Flood Risk Mitigation- A Case Study in Metro Colombo Area," 2020 Moratuwa Engineering Research Conference (MERCon), Moratuwa, Sri Lanka, 2020, pp. 48-53, doi: 10.1109/MERCon50084.2020.9185383.

Rubyhanusha, P. and L. Rajapakse, "Estimation of Impact of Artificial Groundwater Recharge in Small Islands Using a Numerical Modeling Approach," 2020 Moratuwa Engineering Research Conference (MERCon), Moratuwa, Sri Lanka, 2020, pp. 366-371, doi: 10.1109/MERCon50084.2020.9185243.

Hendawitharana S.U., Priyasad M.K.D.D., Rajapakse R.L.H.L. (2020) Comparative Study of Spatial and Temporal Variation of Drought Using Remotely Sensed Data - A

Case Study for Kirindi Oya Basin. In: Dissanayake R., Mendis P. (eds) ICSBE 2018. ICSBE 2018. Lecture Notes in Civil Engineering, vol 44. Springer, Singapore. DOI: https://doi.org/10.1007/978-981-13-9749-3_11, ISBN: 978-981-13-9749-3.

Dahanayake, A. C. and Rajapakse, R. L. H. L. (2019). Distributed Modelling of Water Resources and Pollute Transport in Malwathu Oya Basin, Sri Lanka, Journal of the National Science Foundation of Sri Lanka (JNSF), 2019, 47(3): pp. 307-321. DOI: http://doi.org/10.4038/jnsfsr.v47i3.9281, (Registered E-ISSN: 2362-0161)..

Rubuhanusha P., Rajapakse, R. L. H. L. (2019). Significance of Spatial Variability in Preparation for Stream Flow Modeling in Maha Oya Basin, Sri Lanka 5th International Multidisciplinary Engineering Research Conference - 2019 ERU, University of Moratuwa, July 3 - July 5 2019, IEEE Catalog Number: CFP18B72-POD; ISBN: 978-1-5386-4418-8.

Kahaduwa, A. U., Rajapakse, R. L. H. L. (2019). Rainfall Variability and Effect of Different Spatial Interpolation Methods on Streamflow Modeling in Kalu Ganga Basin, Sri Lanka 5th International Multidisciplinary Engineering Research Conference - 2019 ERU, University of Moratuwa, July 3 - July 5 2019, IEEE Catalog Number: CFP18B72-POD; ISBN: 978-1-5386-4418-8.

Karunarathne H.M.A.D.S.S., Rajapakse, R. L. H. L. (2019). Effect of Different Methods for Spatial Interpolation of Rainfall Data for Hydrological Modeling in Dry Zone Mi Oya Basin, Sri Lanka 5th International Multidisciplinary Engineering Research Conference - 2019 ERU, University of Moratuwa, July 3 - July 5 2019, IEEE Catalog Number: CFP18B72-POD; ISBN: 978-1-5386-4418-8.

Dahanayake, A. C. and Rajapakse, R. L. H. L. (2019). Water Quality Deterioration in the Malwathu Oya Basin, Sri Lanka and the Need for Physics-based Modelling. 5th International Multidisciplinary Engineering Research Conference - 2019 ERU, University of Moratuwa, July 3 - July 5 2019, IEEE Catalog Number: CFP18B72-POD; ISBN: 978-1-5386-4418-8.

Dissanayaka, K. D. C. R. and Rajapakse, R. L. H. L. (2019). Long-term precipitation trends and climate extremes in the Kelani River basin, Sri Lanka, and their impact on streamflow variability under climate change. Paddy and Water Environment, https://doi.org/10.1007/s10333-019-00721-6. Springer Publication ISSN: 1611-2490 (Print) 1611-2504 (Online) Impact Factor 1.379 (2003-2018), April 2019, Volume 17, Issue 2, pp 281–289.

Kamran, M. and Rajapakse, R.L.H.L. (2018). Effect of Watershed Subdivision and Antecedent Moisture Condition on HEC-HMS Model Performance in the Maha Oya Basin, Sri Lanka. International Journal of Engineering Technology and Sciences (IJETS) ISSN: 2289-697X (Print); ISSN: 2462-1269 (Online) Vol.5 (2), pp. 22-35. DOI: http://dx.doi.org/10.15282/ijets.5.2.2018.1004.

Perera G.M.C.A. and Rajapakse, R.L.H.L. (2018). Daily and Monthly Lumped Parameter Hydrologic Models for Analysis of Small Watersheds in Sri Lanka, Proceedings of the 2019 Moratuwa Engineering Research Conference (MERCon 2018), Moratuwa, Sri Lanka, 30th May – 01st June 2018, IEEE Catalog Number: CFP18B72-POD; ISBN: 978-1-5386-4418-8, pp. 372-377.

Wijesekera, N.T.S. and Rajapakse, R.L.H.L. (2012). Mathematical Modelling of Watershed Wetland Crossings for Flood Mitigation and Groundwater Enhancement – Case of the Attnagalu Oya River Basin, ENGINEER - The Institution of Engineers, Sri Lanka (July, 2013).

Rajapakse, H., Inomata, H. and Fukami, K. (2010). Diffuse Source Particulate-matter Pollution Modeling in a Semi-Urbanized Agricultural Basin in Japan using Process-

based WEP and an Erosion-transport Model. Water Practice & Technology © IWA Publishing 2010 (doi:10.2166/wpt.2010.051)

Asaeda, T., Rajapakse, L. and Kanoh, M. (2009). Fine sediment retention as affected by annual shoot collapse: Sparganium erectum as an ecosystem engineer in a lowland stream. River Research and Applications (DOI: 10.1002/rra.1322).

Asaeda, T. & Rajapakse, L. (2008). Effects of spates of different magnitudes on a *Phragmites japonica* population on a sandbar of a frequently disturbed river. River Research and Applications 24: 1310-1324.

Asaeda, T., Rajapakse, L. & Fujino, T. (2008). Applications of organ-specific growth models; modeling of resource translocation and the role of emergent aquatic plants in element cycles. Ecological Modeling 215: 170-179.

Asaeda, T., Yamamuro, M., Siong, K., Rajapakse, H. and Sanderson, B. (2008). Nutrient sources for charophytes and *Najas marina* in Myall Lake, Australia, indicated by carbon and nitrogen stable isotope ratios. In: Managing large lakes of the world: health, integrity and risks (Ed.: Jones, Jack. Red., Faaborg, Janice, Proceedings of the 30th Congress of the International Association of Theoretical and Applied Limnology, 12-18 August 2007, Montreal, Canada). Verhandlungen IVL 30: 401-405.

Asaeda, T., Sharma, P. & Rajapakse, L. (2008). Seasonal patterns of carbohydrate translocation and synthesis of structural carbon components in *Typha angustifolia*. Hydrobiologia 607: 87-101.

Sanderson, B. G., Asaeda, T., Rajapakse, L. & Redden, A. M. (2008). Mechanisms affecting biomass and distribution of charophytes and *Najas marina* in Myall Lake, New South Wales, Australia. Hydrobiologia 608: 99-119.

Asaeda, T., Rajapakse, L. & Sanderson, B. (2007). Morphological and reproductive acclimations to growth of two charophyte species in shallow and deep water, Aquatic Botany 86: 393-401.

Rajapakse, L., Asaeda T., Williams, D., Roberts, J., & Manatunge, J. (2006). Effects of water depth and litter accumulation on morpho-ecological adaptations of *Eleocharis sphacelata*. Chemistry and Ecology 22: 47-58.

Asaeda, T., Manatunge, J., Rajapakse, L. & Fujino, T. (2006). Growth dynamics and biomass allocation of *Eleocharis sphacelata* at different water depths: observations, modelling, and applications. Landscape and Ecological Engineering 2: 31-39.

Asaeda, T., Rajapakse, L., Manatunge, J. & Sahara, N. (2006). The effect of summer harvesting of *Phragmites australis* on growth characteristics and rhizome resource storage. Hydrobiologia 553: 327-335.

Shilla, D. A., Asaeda, T., Siong K., Rajapakse L., & Manatunge, J. (2006). Phosphorus concentration in sediment, water and tissues of three submerged macrophytes in Myall Lake, Australia. Wetlands Ecology and Management 14: 549-558.

Asaeda, T., Fujino, T., Rajapakse, L., Sanderson, B. and Redden, A. (2005). Gyttja production by charophytes and its roles in the interaction with other submerged species in an oligotorphic lake. Japan Society of Civil Engineering (JSCE) Journal of Hydraulic Engineering 49: 1208-1212.

12.2 Proceedings of International Symposia

Heraji, H., Rubyhanusha, P. and Rajapakse, R. L. H. L. (2019). Groundwater Hydrology and Management in Small Islands and their Applicability to Small Islands in Maldives and Sri Lanka. Proc. of the International Conference on Civil Engineering

Applications – ICCEA 2019. 25th~26th July 2019, Department of Civil Engineering, University of Moratuwa, Moratuwa 10400, Sri Lanka.

Kahaduwa, A. U. and Rajapakse, R. L. H. L. (2019). Review of Climate Change Impacts on Reservoir Hydrology and Long-term Basin-wide Water Resources Management. Proc. of the International Conference on Civil Engineering Applications – ICCEA 2019. 25th~26th July 2019, Department of Civil Engineering, University of Moratuwa, Moratuwa 10400, Sri Lanka.

Thilakarathne, J. A S. I., Rajapakse, R. L. H. L. and Wijayaratna, T. M. N. (2019). Effect of Climate Change on Monthly Pond Storage Variation - A Case Study in Jaffna, Sri Lanka. Proc. of the International Conference on Civil Engineering Applications – ICCEA 2019. 25th~26th July 2019, Department of Civil Engineering, University of Moratuwa, Moratuwa 10400, Sri Lanka.

Rashid, S. and Rajapakse, R. L. H. L. (2019). Hydraulic Modelling to Optimize the Available Channel Flows in an Arid Zone of Pakistan. Proc. of the International Conference on Civil Engineering Applications – ICCEA 2019. 25th~26th July 2019, Department of Civil Engineering, University of Moratuwa, Moratuwa 10400, Sri Lanka.

Pandit, B. and Rajapakse, R. L. H. L. (2019). Applicability of ABCD Model for the Identification of Suitable Locations for Run-of-the-river Hydropower Generation in Upper Kelani River Basin in Sri Lanka. Proc. of the International Conference on Civil Engineering Applications – ICCEA 2019. 25th~26th July 2019, Department of Civil Engineering, University of Moratuwa, Moratuwa 10400, Sri Lanka.

Choden, P. and Rajapakse, R. L. H. L. (2019). Assessment and Regionalization of Hydrological Model Parameters in Neighbouring Pho Chhu and Mo Chhu Basins in Bhutan - A Study based on ABCD Model. Proc. of the International Conference on Civil Engineering Applications – ICCEA 2019. 25th~26th July 2019, Department of Civil Engineering, University of Moratuwa, Moratuwa 10400, Sri Lanka.

Yadav, D. K. and Rajapakse, R. L. H. L. (2019). Precipitation Trends over the Three Climatic Zones of Mahaweli Basin and Evaluation of Climate Change Impacts on Streamflow Variability. Proc. of the International Conference on Civil Engineering Applications – ICCEA 2019. 25th~26th July 2019, Department of Civil Engineering, University of Moratuwa, Moratuwa 10400, Sri Lanka.

Thilakarathne, J.A.S.I., Wijayaratna, T.M.N. and Rajapakse, R.L.H.L. (2018). Holistic Behavior of Urban Pond Systems for Flood Risk Mitigation - A Case Study in Jaffna Municipal Council Area. In: Proceedings of the Ninth International Conference on Sustainable Built Environment 2018 (ICSBE 2018). Kandy, Sri Lanka, 13th – 15th December 2018. (ISBN 978-955-589-192-9).

Hendawitharana S. U., Priyasad, M. K. D. D., and Rajapakse, R. L. H. L. (2018). Comparative Study of Spatial and Temporal Variation of Drought using Remotely Sensed Data - A Case Study for Kirindi Oya Basin. In: Proceedings of the Ninth International Conference on Sustainable Built Environment 2018 (ICSBE 2018). Kandy, Sri Lanka, 13th – 15th December 2018. (ISBN 978-955-589-192-9).

Hendawitharana , S. U., Priyasad, M. K. D. D. & Rajapakse, R. L. H. L. (2018). Sub-basin scale Drought Forecasting with Standard Precipitation Index by using Remotely Sensed Precipitation and LSTM. 18th International Conference on Advances of ICT for Emerging Regions 2018 (ICTer), Colombo.

Dissanayaka, K.D.C.R. and Rajapakse, R.L.H.L. (2018). Climate Extremes and Precipitation Trends in Kelani River Basin, Sri Lanka and Impacts on Streamflow

Variability under Climate Change. 2nd International Conference on Climate Change 2018 (ICCC 2018), 15th~16th February, 2018, Colombo, Sri Lanka.

Perera, G.M.C.A. and Rajapakse, R.L.H.L. (2018). A study on use of daily and monthly lumped parameter hydrologic models for analysis of Maha Oya river basin. In: University of Ruhuna-Department of Civil Engineering Annual Conference. Sixth International Symposium on Advances in Civil and Environmental Engineering Practices for Sustainable Development (ACEPS 2018). 15th March 2018, Galle, Sri Lanka.

Sasanka, P.W.H. and Rajapakse, R.L.H.L. (2018). A Study on Suitability of Four Parameter 'abcd' Hydrologic Model to Simulate Rainfall Runoff in Selected Watersheds in Sri Lanka. In: University of Ruhuna-Department of Civil Engineering Annual Conference. Sixth International Symposium on Advances in Civil and Environmental Engineering Practices for Sustainable Development (ACEPS 2018). 15th March 2018, Galle, Sri Lanka.

Palihawadana, L.N. and Rajapakse, R.L.H.L. (2018). A Comparative Analysis of Model Performance of Two Lumped Parameter Hydrologic Models in Estimating Rainfall Runoff in Small Watersheds in Sri Lanka and their Applicability in Water Resource Management. In: University of Ruhuna-Department of Civil Engineering Annual Conference. Sixth International Symposium on Advances in Civil and Environmental Engineering Practices for Sustainable Development (ACEPS 2018). 15th March 2018, Galle, Sri Lanka.

Kamran, M. and Rajapakse R. L. H. L. (2017). Effect of watershed subdivision and antecedent moisture condition on HEC-HMS model performance in the Maha Oya Basin, Sri Lanka. In: proceedings of the 5th International Young Researchers Workshop on River Basin Environment & Management, Universiti Malaysia Pahang, Kuantan, Malaysia, 28~29 October 2017.

Dahanayake, A.C. and Rajapakse, R.L.H.L. (2017). Sustainable Solutions for the Drying Up of Groundwater Wells - A Case Study in a Selected Watershed in Dampe, Sri Lanka. In: UMCSAWM Water Conference 2017, UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM), 19th January 2017, University of Moratuwa, Sri Lanka (ISBN: 978-955-9027-61-4).

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Dahanayake, A.C. and Rajapakse, R.L.H.L., 2016. Application of a Process-based, Distributed, Hydrological and Material Transport Model to Assess Water Resources and Pollute Transport in Malwathu Oya Basin, Sri Lanka. In: University of Moratuwa, University of Peradeniya and University of Ruhuna, Sri Lanka, Seventh International Conference on Sustainable Built Environment 2016 (ICSBE 2016), 16th-18th December 2016, Kandy, Sri Lanka.

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Dahanayake, A.C. and Rajapakse, R.L.H.L., 2016. Drying Up of Groundwater Wells and Sustainable Development Options for Preservation of Groundwater in Sri Lanka. In: Department of Civil and Environmental Engineering, University of Ruhuna, Sri Lanka and Department of Civil and Environmental Engineering, Saitama University, Japan, Fourth International Symposium on Advances in Civil and Environmental Engineering Practices for Sustainable Development (ACEPS 2016). Galle, Sri Lanka, 3rd March 2016.

M. A. A. R. Dilhara and R. L. H. L. Rajapakse, 2016. Assessment of Groundwater Resource Utilization in Wet and Dry Zone Aquifers in Sri Lanka and Quantifying Recharge Losses due to Urbanization and Land-use Change. Proceedings of Civil Engineering Research Symposium 2016 (CERS 2016), Department of Civil Engineering, University of Moratuwa, Sri Lanka, 8th December, 2016.

Rajapakse, R.L.H.L. (2013). Flood Forecasting and Management in Sri Lanka; where more pragmatic approaches and technical considerations are needed. ICHARM Special Session on Closing Gap Between Research And Practice in Water Resources and Disaster Management: SRJCR 2013, Conference on Sri Lanka - Japan Collaborative Research 2013, 29th - 31st March, University of Peradeniya, Sri Lanka.

Mayooran S., Manarathna S.P., Gogulan N., Rajapakse R. L. H. L. (2011). An Aquifer Characteristic Analysis for Identifying Groundwater Resource Development Alternatives in the Wet Zone of Sri Lanka, Symposium on Civil Engineering Research for Industry – 2011, Department of Civil Engineering, University of Moratuwa, December 2011.

Rajapakse, H., Inomata, H., & Fukami, K. (2009). Nonpoint Source Pollution Modeling in Yata River Basin, Japan; Process-based approach for assessing excess fertilizer effects and implications for basinwide management. Proceedings of the 12th Annual Conference of the Japan Society on Water Environment (JSWE), pp. 25-26, Tokyo, Japan, 14-15 September 2009.

Hemantha Rajapakse, Hironori Inomata, Kazuhiko Fukami (2009). Diffuse-source Particulate Nitrogen and Phosphorus Pollution Modeling in Yata River Basin in Japan using Process-based WEP model coupled with a Sediment Erosion-transport Model. Proceedings of the JSHWR 2009: Annual Research Session of the Japanese Society of Hydraulics and Water Resources, pp., Kanazawa, Japan, 19-21 August.

Hemantha Rajapakse, Hironori Inomata, Kazuhiko Fukami, Iizumi Yohiko & Tsuyoshi Kinouchi (2008). "The Impact of Nitrogen and Phosphorus Fertilizer Loading on

River and Subsurface Water Quality in Yata River Basin, Japan: An Integrated, Basin-wide Modeling Approach". Proceedings of the JSHWR 2008: Annual Research Session of the Japanese Society of Hydraulics and Water Resources, pp. 58-59, Tokyo, Japan, 26-28 August.

Rajapakse, H. L. & Jayawardena, A. W. (2008). "The Role of Dams in Sri Lanka from Ancient Times to the Present", Proceedings of the International Seminar on Role of Dams, Annual Session of the Japan Dam Engineering Centre, pp. 55-60, Tokyo, Japan, April 23, 2008.

Lalith Rajapakse, Takashi Asaeda, Takeshi Fujino & Jagath Manatunge (2005). "Growth and survival strategies of *Eleocharis sphacelata* in response to different water regimes". Proceedings of the 5th Annual Research Session of Sri Lanka Students' Association in Japan, pp. 18-23, Tokyo, Japan, 04th September 2005.

Lalith Rajapakse, Takashi Asaeda, Takeshi Fujino & Jagath Manatunge (2005). "Adaptations in growth and survival strategies of *Eleocharis sphacelata* in response to different water regimes", Proceedings of the JSCE 2005 7th International Summer Symposium, pp. 323-326, Tokyo, Japan, 30 July 2005 (Incl. Oral presentation).

Takashi Asaeda, Takeshi Fujino, Lalith Rajapakse, Brian Sanderson & Anna Redden (2005). "The relationship between production of *gyttja* and Charophytes in an oligotrophic lake and the effects of depth gradient". Proceedings of the 49th Water Engineering Conference, Kokushikan University, Tokyo, Japan, 07-15 March 2005.

Takashi Asaeda, Lalith Rajapakse, Manatunge Jagath & Takeshi Fujino, 2004. "Effects of environmental differences on the growth of emergent plants". Proceedings of the 51st Annual Meeting of the Ecological Society of Japan (JES51), Kushihiro, Hokkaido, Japan, 25-29 August 2004.

Lalith Rajapakse, Takashi Asaeda, Jagath Manatunge & Anna Redden, 2004. "Contribution of submerged macrophytes in the formation of *gyttja* and nutrient cycling in Myall Lake, NSW, Australia". Proceedings of the 4th Annual Research Session of Sri Lanka Students' Association in Japan, pp. 22-28, Tokyo, Japan, 17th October 2004 (Incl. Oral presentation).

Rajapakse, L., Sato, K. & Adachi, K. (1999). "An approach based on telemeter data to mitigate land subsidence during drought seasons in Saitama basin". Proceedings of the 54th Annual Conference of Japanese Society of Civil Engineers, pp. 341-345, 22-26 Sept. 1999, Hiroshima, Japan (Incl. Oral presentation).

Rajapakse, L., Sato, K. & Adachi, K. (1999). "Groundwater control and mitigation of land subsidence during drought seasons by means of telemeter data transmission system in Saitama, Japan". Proc. of the International Symposium on Groundwater in Environmental Problems, pp. 47-50, 12-14 January 1999, Chiba University, Japan (Incl. Oral presentation).

12.4 Papers presented at International Workshops

Rajapakse, H., Inomata, H., & Fukami, K. (2009). Diffuse Source Particulate-matter Pollution Modeling in a Semi-Urbanized Agricultural Basin in Japan using Process-based WEP and an Erosion-transport Model. Proceedings of the 13th International Conference on Diffuse Pollution and Integrated Watershed Management (IWA-DIPCON 2009), pp. 194-195, Seoul, Korea, 12-15 October 2009.

Asaeda, T., Rajapakse, L. and Kanoh, M. (2009). Retention rate of fine sediments due to the annual shoot collapse; *Sparganium erectum* as an ecosystem engineer in a lowland stream. Proceedings of the 12th European Weed Research Society (EWRS)

International Symposium on Aquatic Weeds, pp. , Jyväskylä, Finland, 24-28 August 2009.

Chavoshian, A., Miyake, K., Sugiura, T., Hai, P. T., & Rajapakse, H. (2009). Charting ICHARM's strategy for integrated flood risk management in the Lower Mekong River Basin. Proceedings of the 7th Annual Mekong Flood Forum (AMFF-7), Bangkok, Thailand, 13-14 May 2009.

Rajapakse, H., Inomata, H., & Fukami, K. (2008). Effects of surplus fertilizer loading on stream and subsurface water quality in Yata River Basin, Japan: An integrated, basin-wide modeling approach. Proceedings of the 4th Annual Conference of the Asia Pacific Association of Hydrology and Water Resources (APHW), Beijing, China, 03-05 November 2008.

Lalith Rajapakse, Takashi Asaeda, & Takeshi Fujino (2007). "Adaptations of *Eleocharis sphacelata* to water regime: Modeling of growth, morpho-ecological traits and decomposition to identify management needs", Proceedings of TAAL 2007: The 12th World Lakes Conference, Jaipur, India, 28 October-2 November 2007.

Takashi Asaeda, Lalith Rajapakse & Takeshi Fujino (2006). "Modelling of the Resource Allocation of the Above- and Belowground Biomass of *Eleocharis sphacelata*; Emergent Plants in Wetlands and Implications of their Surviving Strategies", Proceedings of ICEM 2006: International Conference on Ecological Modelling, pp. , Yamaguchi, Japan, 28 August-01 September, 2006.

Asaeda, T., Sanderson, B., Redden, A. & Rajapakse, L. (2006). "Nutrient cycles and vegetation characteristics of *gyttja* layer in Lake Myall, Australia", Proceedings of SWS 2006: Annual Session of Soil and Water Society, pp. , Cairns, Australia, 09-14 July, 2006.

Takashi Asaeda, Takeshi Fujino, Lalith Rajapakse (2006). "Effects of flood patterns on the growth of *Phragmites japonica* - Applications for flood plain management", Proceedings of ICLEE 2006: International Conference on Ecological Restoration in East Asia 2006, International Consortium of Landscape and Ecological Engineering, pp. , Osaka, Japan, 16-18 June 2006.

Lalith Rajapakse, Takashi Asaeda, Takeshi Fujino & Jagath Manatunge (2005). "Adaptations in growth and survival strategies of *Eleocharis sphacelata* in response to different water regimes", Proceedings of the JSCE 2005: 7th International Summer Symposium of the Japanese Society of Civil Engineering, pp. 323-326, Tokyo, Japan, 30 July 2005

Asaeda, T., Sanderson, B., Redden, A., Manatunge, J., Rajapakse, L. & Fujino, T. (2005). "Distribution of charophytes and other submerged macrophytes in Myall Lake, Australia, and its role in nutrient cycling". Proceedings of the ASLO 2005: Summer Meeting of the American Society of Limnology and Oceanography, pp. , Santiago de Compostela, Spain, 19-24 June 2005.

Takashi Asaeda, Brian Sanderson, Anna Redden, Jagath Manatunge, & Lalith Rajapakse, 2004. "Distribution of Charophytes and other submerged macrophytes in Myall Lake and its role in the nutrient cycling". Proc. of the ASPAB 2004: 19th Annual Conference of the Australian Society for Physics and Aquatic Botany, Adelaide, Australia, 5-8th December 2004.

Lalith Rajapakse, Takashi Asaeda, Jagath Manatunge, Kian Siong, Daniel Shilla, Anna Redden and Brian Sanderson, 2004. "The role of Charophytes in production and nutrient cycling in Myall Lake, NSW, Australia". Proceedings of IRGC 2004: the 4th Symposium of the International Research Group on Charophytes on Extant and Fossil Charophytes, pp. 50, Robertson, Australia., 25-27 September 2004.

Anna Redden, Takashi Asaeda, Lalith Rajapakse, Jagath Manatunge, Brian Sanderson and Joanne Wilson (2005). "Seasonal distribution and biomass of Charophytes in Myall Lake, a large and shallow near-pristine lake in NSW, Australia". Proceedings of IRGC 2004: the 4th Symposium of the International Research Group on Charophytes, pp. 53, Robertson, Australia. 25-27 September 2004.

Takashi Asaeda, Brian Sanderson, Anna Redden, Jagath Manatunge and Lalith Rajapakse, 2004. "Distribution and abundance of Charophytes and other submerged macrophytes in relation to gyttja thickness and light availability". Proceedings of IRGC 2004: the 4th Symposium of the International Research Group on Charophytes on Extant and Fossil Charophytes, pp. 11, Robertson, Australia, 25-27 Sept, 2004.

Takashi Asaeda, Lalith Rajapakse, Jagath Manatunge, 2004. "Growth and morphological adaptations of *Eleocharis sphacelata* to different water depths and climatic conditions". Proceedings of INTECOL 2004: the 7th International Wetlands Conference, pp. 19, UTRECHT, The Netherlands, 25-30 July 2004.

12.5 Theses Submitted

RAJAPAKSE Hemantha Lalith, "Growth and morphological characteristics of littoral zone sedge species and their adaptations to water depth: A comparative study and implications for river restoration and ecosystem management". A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy at the Graduate School of Science and Engineering, Saitama University, Japan (September 2005).

Rajapakse R. L. H. L., "Groundwater Control and Mitigation of Land Subsidence During Drought Seasons by means of Telemeter Data Transmission System in Saitama, Japan". A thesis submitted in partial fulfilment of the requirements for the degree of Master of Engineering in Civil and Environmental Engineering at the Graduate School of Science and Engineering, Saitama University, Japan (September 1999).

Rajapakse R. L. H. L., Hapuarachchi, C. L., Weerasekera, I. R. A., "Buckling of slender piles and lateral reaction of the media". A thesis submitted in partial fulfilment of the requirements for the degree of Bachelor of Science of Engineering in Civil Engineering at University of Moratuwa, Sri Lanka (June 1996).

12.6 Other Academic Achievements

Keynote Lectures, Invited Speeches, Resource Person, etc.

Rajapakse, R.L.H.L. (2019). Resource Person for 3-Day Training program on Environmental and Social Safeguard for University Non-academic Staff, "Drainage Management Options and Best Management Practices (BMP) for Minimum/Low Impact Development (M/LID) Alternatives", Accelerating Higher Education Expansion and Development Operation April 3 - 5, 2019, AHEAD Office - 4th floor Etisalat Building Rotunda Garden, Colombo- 03.

Rajapakse, R.L.H.L. (2018). Resource Person for the 2-Day International Workshop on Hydrologic Modelling using HEC-HMS & HEC-RAS, Organized by Water Forum/Library & Publication Committee of Institution of Engineers Sri Lanka (IESL). Section C (Engineering. Architecture. Surveying) of Sri Lanka Association for the Advancement of Science (SLAAS) and Ecosphere Resilience Research Centre, University of Sri Jayewardenepura at the International Water Management Institute, Battaramulla on 15 Oct 2018.

Rajapakse, R.L.H.L. (2014). Integrated Surface Water and Groundwater Modelling Approach for Flood Mitigation and Sustainable Watershed Management, International Forum for Mathematical Modelling (IFMM 2014), Workshop on Introduction to Modelling in Water Resources. Research & Development Centre for Mathematical Modelling Department of Mathematics University of Colombo; 13th March 2014, Sri Lanka.

Rajapakse, R.L.H.L. (2014). Impact of Hydrology on Planning of Mitigatory Actions on Flood Control Drainage & Irrigation. Professional Development Training Program on Implementation, Operation & Maintenance, Monitoring & Evaluation of Flood Control, Drainage & Irrigation in Sri Lanka. Workshop organized by Asian Institute of Technology (AIT) at the Central Bank Training Institute, 16th April 2014, Colombo, Sri Lanka.

Rajapakse, R. L. H. L. (2013). Invited Speech/Resource Person for the Professional Development Training Program on Implementation, Operation & Maintenance and Evaluation of Flood Control, Drainage & Irrigation Schemes with Emphasis of Quality Control in Sri Lanka, 02-13 December 2013, AIT Training Program to Bangladesh Delegation, AIT Extension Asian Institute of Technology, Thailand.

Rajapakse, H. L. (2009). National Water Resources Management Policy for Sustainable Economic Development in Sri Lanka; Better Late Than Never. Keynote Lecture delivered at the 9th Annual Research Session of the SLSAJ (Sri Lankan Students' Association in Japan). SLSAJ RS/RJ 2009 at the premises of the Embassy of Sri Lanka in Japan, Tokyo, Japan. (08 November 2009, Tokyo, Japan).

Rajapakse, H. (2009). Modelling for NPS Management: Process based modelling of agricultural nonpoint-source pollution at watershed scale; Application to Yata River Basin in Japan and implications for management. Invited presentation at the International Workshop on Non-point Source Management in Rural Area and Saemangeum Watershed. DIPCON 2009 Special Workshop co-organized by Korea Rural Community Corporation and Korea INWEPF (International Network for Water and Ecosystem in Paddy Fields), Seoul, Korea, 13 October 2009.

Rajapakse, H. (2009). River Basin Management in Japan: Past, Present and Future Directions. Invited Lecture at the Special Session at the World City Water Forum (WCWF) 2009 co-organized by Asian Development Bank/Asia-Pacific Water Forum (APWF) KnowledgeHubs on Basin Water Resources & Water Quality Management at the Launch of Knowledge Hub on Water Quality Management in River Basins (K-water, Korea), Incheon, Korea, 18-21 August 2009.

Rajapakse, H. L. 2008. "The Role of Dams in Sri Lanka from Ancient Times to the Present: Historical Development and Changing Perspectives to Serve Diverse Development Needs", Invited Lecture at the International Seminar on Role of Dams, co-organized by Japan Dam Engineering Centre, National Institute of Water Resources Engineering & Water Resources and Environmental Management Centre; held at Japan Dam Engineering Centre, Tokyo on April 23, 2008.

12.7 Theses Supervised

Dahanayake, A. C. (2019). Basinwide Analysis of Water Resources and Pollute Transport Using a Distributed Parameter Model. Degree of Master of Philosophy in Civil Engineering, Department of Civil Engineering, University of Moratuwa, Sri Lanka, September 2019 (MPhil Thesis).

Hendawitharana, S. U. (2019). Spatial and Temporal Analysis of Rainfall and Drought and Development of a Drought Prediction Model by using Multi-model Ensembled

Approach. Degree of Master of Science in Civil Engineering, Department of Civil Engineering, University of Moratuwa, Sri Lanka, September 2019 (MSc Thesis).

Thilakarathne, J. A. S. I. (2019). A Case Study on Sustainable Restoration Approach for Cascade Pond Systems in Jaffna Municipal Council Area for Effective Flood Management. Degree of Master of Science in Civil Engineering, Department of Civil Engineering, University of Moratuwa, Sri Lanka, September 2019 (MSc Thesis).

Karma Yangzom Dorji (2019). The Effect of Antecedent Moisture Condition on HEC-HMS Model Performance: A Case Study In Kelani River Basin, Sri Lanka. Degree of Master of Science in Water Resources Engineering and Management, Department of Civil Engineering, University of Moratuwa, Sri Lanka, September 2019 (MSc Thesis).

Rohit Adhikari (2019). Estimation of SCS Curve Number for Streamflow Modelling - A Case Study of Badalgama Watershed in Maha Oya Basin, Sri Lanka. Degree of Master of Science in Water Resources Engineering and Management, Department of Civil Engineering, University of Moratuwa, Sri Lanka, September 2019 (MSc Thesis).

Mohammad Najim Nasimi (2019). Continuous Hydrological Modeling using Soil Moisture Accounting for Water Resources Assessment in Kelani River Basin, Sri Lanka. Degree of Master of Science in Water Resources Engineering and Management, Department of Civil Engineering, University of Moratuwa, Sri Lanka, September 2019 (MSc Thesis).

Dulan Nalaka Gunasekara, (2018). Application of 'abcd' Monthly Water Balance Model for Kalu Ganga and Gin Ganga Basins and its Application Potential for Water Resources Investigation. Degree of Master of Science in Water Resources Engineering and Management, Department of Civil Engineering, University of Moratuwa, Sri Lanka, October 2018 (MSc Thesis).

Ugyen Wangchuk, 2018. Suitability of abcd water balance model for assessment of water resources in Kelani basin and Kirindi basin in Sri Lanka, Degree of Master of Science in Water Resources Engineering and Management, Department of Civil Engineering, University of Moratuwa, Sri Lanka, October 2017 (MSc Thesis).

Ahmad Mohi Uddin, 2018. Effect of catchment scale and comparison of loss and base flow methods available in HEC-HMS for continuous simulation for efficient water resource management in Kelani river basin, Sri Lanka, Degree of Master of Science in Water Resources Engineering and Management, Department of Civil Engineering, University of Moratuwa, Sri Lanka, October 2017 (MSc Thesis).

Muhammad Kamran, 2017. The Effect of Watershed Subdivision and Antecedent Moisture Condition on HEC-HMS Model Performance in the Maha Oya Basin in Sri Lanka, Degree of Master of Science in Water Resources Engineering and Management, Department of Civil Engineering, University of Moratuwa, Sri Lanka, October 2017 (MSc Thesis).

C. R. Dissanayaka, 2017. Stream Flow Forecast and Reservoir Performance Assessment under Climate Change in Kelani Basin, Sri Lanka, Degree of Master of Science in Water Resources Engineering and Management, Department of Civil Engineering, University of Moratuwa, Sri Lanka, October 2017 (MSc Thesis).

Jigme Tshewang, 2016. Rainfall-Runoff Simulation Model Based on Water Balance Concept for Basinwide Water Resource Assessment – A Case Study in Upper and Lower Catchments of Deduru Oya Basin, Sri Lanka, Degree of Master of Science in Water Resources Engineering and Management, Department of Civil Engineering, University of Moratuwa, Sri Lanka, October 2016 (MSc Thesis).

Dissanayake, D.M.S.S, 2016 Study of Urban Water Demand and Distribution System Reliability – A Case Study of Maharagama Water Supply Scheme, Sri Lanka, Degree

of Master of Science in Water Resources Engineering and Management, Department of Civil Engineering, University of Moratuwa, Sri Lanka, October 2016 (MSc Thesis).

Nawarathne, R. M. A. R. (2015). An Integrated Water Resources Management Approach for Attanagalu Oya Basin, Sri Lanka. Post Graduate Diploma in Engineering (IESL PG Dip), Thesis supervised by: R. L. H. L. Rajapakse.

Munaver Jaman, 2014. Rainwater Harvesting Practices in Sri Lanka and an Investigation on Cost Effective Design Considerations for Wet and Dry Zones. Degree of Master of Science in Water Resources Engineering and Management, Department of Civil Engineering, University of Moratuwa, Sri Lanka, October 2014 (MSc Thesis)

Samarasinghe, S. A. C. M. (2014). Impact on Water Quality Caused by the Construction of Roads: The case of Southern Highway. Post Graduate Diploma in Engineering (IESL PG Dip), Thesis supervised by: R. L. H. L. Rajapakse.

Nawarathne, R. M. A. R. (2011). Approach based on Integrated Water Resources Management for Attanagalu Oya Basin, Sri Lanka. Thesis completed for Graduate Diploma, City & Guilds, UK.

Others

Rajapakse R. L. H. L. (2016). Session Chair: Session on Surface Water Hydrology. 8th International Perspective on Water Resources and the Environment (IPWE) Conference at the Cinnamon Grand Hotel, January 4th ~ 6th, 2016, Colombo, Sri Lanka.

Rajapakse, H. (2009). Session Chair: Session 16-Diffuse Pollution Modelling-1. The 13th International Conference on Diffuse Pollution and Integrated Watershed Management (IWA-DIPCON 2009), Seoul, Korea, 12-15 October 2009.

Rajapakse L. (2008). Session Chair: The 08th Annual Research Session of SLSAJ (Sri Lankan Students' Association in Japan) – RS/RJ 2008. Tokyo, Japan, 06 November 2008.

Rajapakse L. (2006). Session Co-chair: The 06th Annual Research Session of SLSAJ (Sri Lankan Students' Association in Japan) – RS/RJ 2006. Tokyo, Japan, 30 September 2006.

13.0 Academic Journal Review and Sub-editorship

- Assistant to the Subject Editor for international journals, Landscape and Ecological Engineering, Wetlands Ecology and Management, Limnology (2004-2007)
- Reviewer for the international journals aforementioned and River Research and Applications, Water Science and Technology, Hydrobiologia, Aquatic Botany, Wetlands Ecology and Management, Limnology (2005-to date)

14.0 Academic Distinctions, Awards, Scholarships etc.

- First Class Honours for B.Sc. of Engineering (Civil Engineering) by the University of Moratuwa, Sri Lanka, 1996.
- Best Civil Engineering Final Year Project Award for the Structural and Construction Engineering by the University of Moratuwa, Sri Lanka, 1996.

- Postgraduate Scholarship (2 years) to pursue research leading to a Masters degree at Saitama University, Japan by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan, 1997.
- Postgraduate Scholarship (3 years) to pursue research leading to a PhD degree at Saitama University, Japan by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan, 2002.
- Postdoctoral Fellowship (2 years) to pursue research at Saitama University, Japan by the Japan Society for the Promotion of Science (JSPS), 2006.

I hereby declare that the above information given is true and accurate to the best of my knowledge.

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Prof. Eng. R. L. H. L. Rajapakse Date: December 20th, 2020