Lorna Veronica Inniss

Coastal Zone Management Unit Ministry of Environment, water Resources and Drainage Government of Barbados Bay Street, St Michael, Barbados, W.I. Tel: (246) 228-5950; Fax: (246) 228-5956 ID#: 641228-0122

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PERSONAL INFORMATION:

Date of Birth: 28 December 1964

Personal Address: #12 Crane Garden, St Philip, Barbados, BB18079

EDUCATION:

2002: Ph.D. Oceanography and Coastal Sciences; Louisiana State University

1999: M.S. Environmental Sciences (Planning & Management); Louisiana State University

1991: Diploma in Management Studies (Honors); University of the West Indies

1989: B.Sc. Biology (Honors); University of the West Indies

WORKING AND PROFESSIONAL EXPERIENCE:

2004 to present: Deputy Director, Coastal Zone Management Unit, Government of Barbados
2003: Acting Director, Coastal Zone Management Unit, Government of Barbados
2002 to 2003: Acting Deputy Director, Coastal Zone Management Unit, Government of Barbados

1995 to 1996: Acting Marine Biologist, CZMU, Government of Barbados

Managing a staff of seven technicians; planning water quality program; supervision of data collection and analysis; Project Reviewer (South Coast Sewerage Project; Feasibility Studies of Carlisle Bay, Folkstone Park and Marine Reserve, and Harrison's Cave and Associated Sites, Barbados; Barbados Tourism Development Program; Environmental Management Program – East Coast National Park); Member (Barbados Hotel Association Environmental Committee; Barbados Department of Education – School Environmental Curriculum); technical assistance to entrepreneurs in aquaculture (sea moss cultivation, fish rearing).

- 1991 to 1995: Water quality Technician, CZMU, Government of Barbados Coastal water quality analysis and remediation; tar ball monitoring on the East Coast of Barbados; coral reef surveys; benthic surveys in association with side scan sonar; baseline data collection of oceanographic parameters (waves, tides, currents); environmental education; public awareness lectures.
- 1993 to 1996: Officer Cadet/Platoon Commander, Barbados Regiment, Barbados Troop Commander, Female Recruit Company D; training in map reading and navigation, military exercises, communications, military drill, codes, rules of the Army.

- 1991 to 1996: Proprietor and Manager Eljays Shopping Center Human resources management; financial accounting and management; inventory and stock assessment, marketing.
- 1991: Marketing Manager, Barbados Beverages Ltd
 Brand management; increasing market share; developing overseas markets; advertising; management of marketing budget.
- 1989-1990: Administrative Assistant, Claytone Products Inc.
 Human resources management; development of accounting procedures; customer service; management of installation teams.

TEACHING/TRAINING EXPERIENCE

- October 2011: Trainer, Integrated Coastal Zone Management and Climate Change Adaptation, San Andres, Colombia.
- May 2011: Trainer, Integrated Coastal Zone Management and Climate Change Adaptation, National Training Program for Grenada.
- January 2011: Trainer, Integrated Coastal Zone Management. National Training Workshop for St Vincent and the Grenadines
- May 2007-present: External examiner, University of Chennai, India.
- January 2007 Present: Part-time lecturer, Masters in Coastal Zone Engineering, Department of Civil and Environmental Engineering, University of the West Indies, St Augustine, Trinidad and Tobago.
- January 2004-April 2006: Part-time lecturer, Post-Graduate Diploma in Coastal Processes, Department of Civil Engineering, University of the West Indies, St Augustine, Trinidad and Tobago
- Summer 1999: Basic Oceanography, National Youth Science Camp, West Virginia Understanding the basic fields of Oceanography; properties of seawater; marine ecology; global ocean productivity; managing the commerce of the oceans in a sustainable manner. (Funded by the National Science Foundation (NSF)
- Summer 1998: Coastal Zone Management (CZM), National Youth Science Camp, WV Understanding the basic models of CZM; the need for CZM ecological effects and multiple-use conflicts; guiding principles of Integrated Coastal Management (ICM); global prescriptions for CZM; institutions for effective ICM. (Funded by NSF)

RESEARCH EXPERIENCE

Theses and Undergraduate Report:

- Inniss, L.V. 2002. Scientific and Management Perspectives in Wetland Groundwater Hydrology. Ph.D. Dissertation, Louisiana State University, 170pp.
- Inniss, L.V. 1999. Factors Affecting Management Perceived Success of Marine Protected Areas in Small Islands. M.S. Thesis, Louisiana State University, 167pp.

Inniss, L.V. 1989: Mangroves of Barbados, Undergraduate Project Report, University of the West Indies, 20pp.

Publications

- Inniss, L.V. Assessment and Recommendations for Shoreline Stabilisation in San Andres, Colombia, 2011.
- Inniss, L.V. Coastal Damage Assessment for Cat Island, Bahamas, following the Passage of Hurricane Irene. CDEMA Damage Assessment Team, 2011.
- Inniss, L.V. Proposal for a National Integrated Coastal Zone Management Program. Contribution to the World Bank Pilot Program for Climate Resilience: Proposal for Grenada, 2011.
- Inniss, L.V. Proposal for a National Integrated Coastal Zone Management Program. Contribution to the World Bank Pilot Program for Climate Resilience: Proposal for St Vincent and the Grenadines, 2011.
- Inniss, L.V., A. Brathwaite and A. Rowe, 2007. Integrated Coastal Zone Management in Caribbean Small Islands. In: Integrated Coastal Zone Management Present Global Scenario. New India Publishing Agency. May 2008
- Brewster, F.L., Inniss, L.V., Wiggins, A., Hinds, F. and R. Roach, 2007. Integrating Natural Disasters into a Successful Coastal Zone Management Programme: A Barbados Perspective. In: Integrated Coastal Zone Management Present Global Scenario. New India Publishing Agency. May 2006
- Inniss, L.V., A. Rowe, and A. Brathwaite, 2006. Applications of Meteorology in the Barbados Coastal Zone Management Programme. WMO Bulletin, Vol. 54(2) April, 2005.
- Inniss, L.V. (2003) A Proposal to Manage the Graeme Hall Swamp Watershed. Prepared for the Government of Barbados, Ministry of Physical Development and Environment.
- Inniss, L.V. (1995) Carlisle Bay Management Plan (Draft), Carlisle Bay Committee, Bridgetown, Barbados.

Published Abstracts (author underlined is presenter):

- Pounder, C., Hutchinson, T., Farrell, D., Inniss, L.V., Cable, J. E. and J.B. Martin, 2010. Groundwater Inputs To A Mangrove And Sedge Wetland, Graeme Hall, Southern Barbados. American Society for Limnology and Oceanography (ASLO), Santa Fe, New Mexico, 06-11 June 2010
- Inniss, L.V., An Overview of the Coastal Zone Management Programme in Barbados. *Marcuba, Havana, Cuba, December 1-6, 2003*
- Cable, J. E., L.V. Inniss, B.M. Vosburg, E.M. Swenson, and R.E. Turner. Biogeochemical loading *via* groundwater discharge to estuaries: Barataria Basin, Louisiana. *International Union of Geodesy and Geophysics/International Association for the Physical Sciences of the Ocean (IUGG/IAPSO)*, Birmingham, United Kingdom, 18-30 July 1999.
- Inniss, L.V and J.E. Cable. An Analysis of Groundwater Significance in Coastal Watersheds. *American Society for Limnology and Oceanography (ASLO)*, Albuquerque, New Mexico, 12-16 February 2001.

Seminars and Presentations:

- Inniss, L.V. Caribbean Tsunamis and the Barbados Tourism Sector. Guest Speaker, Ministry of Environment's Annual Tourism Symposium, 2010.
- Inniss, L.V. Caribbean Tsunamis: How real the threat? How significant the impact? Barbados Association of Engineering Draughtsmen.
- Inniss, L.V. Tsunamis and Other Coastal Hazards for the Caribbean and Adjacent Regions. Fortescue Neighbourhood Watch Association, 2010.
- Inniss, L.V. Tsunamis and Other Sea Level-Related Hazards. Barbados Defense Force Officers and Non-Commissioned Officers, 2010.
- Inniss, L.V. Cliimate Change Education in Small Island Developing States. UNESCO conference, Bahamas, 2011
- Inniss, L.V. Climate Change and You: Individual Stewardship and Responsibility, Dame Elsie Payne Memorial Lecture, Queen's College, 2011
- Inniss, L.V. Challenges and Opportunities Related to the Establishment of the Tsunamis and Coastal Hazards Warning System for the Caribbean and Adjacent Regions. Senate of the Republic of France, Paris, France, 2010.
- Inniss, L.V. Invasive Species and the Function of the International Maritime Organization. Post-Graduate Lecture and Presentation, CERMES, University of the West Indies, Cave Hill, Barbados, 2010.
- Inniss, L.V. Tsunamis and Coastal Hazards Warning System for the Caribbean and Adjacent Regions, COLAC/MARCUBA Cuba, December 2009.
- Opadayi, J., Spence .B and L.V. Inniss. The Role of Data in ICZM. Caribbean Risk Management Initiative, Turks and Caicos Islands, January 2008.
- Inniss, L.V. Twenty years of Data Collection to Support the Coastal Zone Management Programme in Barbados. GEOSS in the Americas Symposium, September 2007.
- Inniss, L.V. Progress towards the development of a Tsunami and Other Coastal Hazards Early Warning System for the Caribbean and Adjacent Regions, ISDR Side Event, UN Economic and Social Council, Geneva, July 2007
- Inniss, L.V. Current Programmes of the Regional Sub-Commission of the International Oceanographic Commission (Iocaribe). Caribbean Biodiversity Workshop, Margarita, Venezuela, June 12-14, 2004.
- Inniss, L.V. Managing Coastal Ecosystems for Sustainable Tourism Institute Course. Whitewater to Bluewater Partnership Conference, Miami March 22-26, 2004.
- Inniss, L.V. An Overview of the Coastal Zone Management Programme in Barbados. *Marcuba, Havana, Cuba December1-6 2003*.
- Inniss, L.V. An Analysis of Groundwater Significance in Coastal Watersheds. *American Society for Limnology and Oceanography (ASLO)*, Albuquerque, New Mexico, 12-16 February 2001.
- Inniss, L.V. State of the Marine Protected Areas of Barbados: Problems and Future Developments. Conference on Marine Protected Areas, The Nature Conservancy, St Croix, US Virgin Islands, 10 December 1998.
- Inniss, L.V. The Development of a Marine Park at Carlisle Bay, Barbados. Summer Institute in Coastal Management, Coastal Resources Center, University of Rhode Island, Narragansett, Rhode Island, 20 June 1998.

Inniss, Lorna V.

Inniss, L.V. Folkstone Park and Marine Reserve: Success or Failure? Workshop on Management of Marine Protected Areas, Virgin Islands Ecological Research Station, St John, US Virgin Islands, 14 May 1992 (Invited Contribution)

Membership in Professional Societies:

American Geophysical Union (AGU) American Society for Limnology and Oceanography (ASLO)

Honors and Awards:

1999: Recipient, Louisiana Board of Regents - Research Assistantship

1998: Recipient, Fellowship of the Organization of American States

1998: Recipient, Louisiana State University Tuition Award

1998: Recipient, World Wildlife Fund Travel Grant

1996: Recipient, J. William Fulbright Fellowship

1994: Recipient, European Development Foundation Travel Grant

Major Areas of Research Interest:

Subsurface fluid exchange in coastal wetland systems

The effects of geology and physical processes on coastal subsurface fluid dynamics The behavior of gases at the air-sea interface, and physical parameters that affect flux rates The financial, ecological, and competitive interactions between tourism and conservation The utility of Marine Protected Areas (MPAs) in Integrated Coastal Zone Management

Field and Cruise Experience:

2002-2010: Graeme Hall Swamp, Barbados: Surface and Sub-surface Hydrology Studies 1999-2001: SE Everglades, Florida: Groundwater discharge studies in coastal waters and wetlands

1999-2001: Barataria Basin, Louisiana: Hydrologic studies of subsurface fluid transport

1999-2000: University Lake, Louisiana: Patterns of gaseous exchange at the air-water interface and ingrowth patterns of ²²²Radon in the water column

29 March to 03 April, 1998: R/V *Pelican*, Gulf of Mexico and Mississippi River Plume. Experimental sampling techniques and use of biological oceanographic equipment.

16 to 28 July 1994: NOAA vessel R/V *Malcolm Baldridge*, Eastern Caribbean Sea and Tropical Western Atlantic. Current and water mass observations in support of the NOAA Climate and Global Change Program's "Atlantic Climate Change Program" (ACCP).

Professional Services and Workshops

2011: Expert, Technical Working Group on Coastal Hazards, Paris.

2011: Delegate and Presenter, Third Session of Ad Hoc Working Group of the Whole of the UN General Assembly on the Regular Process, New York.

- 2011: Delegate and Presenter, Twenty-sixth Session of the Assembly and Executive Council of the Intergovernmental Oceanographic Commission, UNESCO, France.
- 2011: Delegate, Third Session of the International Working Group on Tsunamis and Coastal Hazards, Paris France.
- 2011: Presenter, Second Session of Ad Hoc Working Group of the Whole of the UN General Assembly, Regular Process.
- 2010: Co-Coordinator, UN Group of Experts for the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-Economic Aspects, New York City, New York.
- 2010: Participant, Third Meeting of the Working Group on Tsunamis (TOWS), Lisbon, Portugal
- 2010: Chair, Fifth Session of the IOC Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning system for the Caribbean Sea and Adjacent Regions, Managua, Nicaragua
- 2009: Member, UN Group of Experts on the Revision of Guidelines for UNCLOS Provisions on Marine Scientific Research, New York City, New York
- 2009: Technical Advisor, UNESCO Mission on Tsunamis Early Warning Systems, Santo Domingo, Dominican Republic
- 2009: Chair, First Session of the Steering Committee of the Caribbean Large Marine Ecosystem Project, Cartagena, Colombia
- 2009: Chair, Fourth Session of the IOC Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning system for the Caribbean Sea and Adjacent Regions, Martinique, France
- 2008: All Hazards Conference, Montego Bay, Jamaica
- 2008: Best practices in Tsunami Community Preparedness, Panama City, Panama
- 2008: Summit on Coastal Cities: Values and Vulnerabilities, St Petersburg, Florida USA
- 2008: Delegate, Twenty fifth Session of the IOC/UNESCO General Assembly, Paris
- 2008: Delegate, Best Practices in Community Based Early Warning Systems, Panama City, Panama
- 2008: Delegate: Tsunami Modelling Training Workshop, Norwegian Geotechnical Institute, Oslo, Norway
- 2008: Delegate, Second Work shop for the Development of the Caribbean Marine Atlas, St Augustine, Trinidad and Tobago
- 2008: Delegate: Third Session of the IOC Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning system for the Caribbean Sea and Adjacent Regions, Panama City, Panama.
- 2008: Delegate, First Workshop for the Development of the Caribbean Marine Atlas, Oostende, Belgium
- 2008: Trainer, Caribbean Risk Management Initiative Workshop, Turks and Caicos Islands
- 2007: Delegate, GEOSS in the Americas Symposium, Brazil
- 2007: Delegate, Twenty fourth Session of the IOC/UNESCO General Assembly, Paris
- 2007: Delegate, Second Session of the IOC Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean Sea and Adjacent Regions, Cumana, Venezuela
- 2006: Project Advisor, IDB Township Planning Strategies for Storm Surge in the Caribbean
- 2006: Delegate, Workshop on Article 76 of the Convention on the Law of the Sea and Delimitation of Maritime Boundaries, Bridgetown Barbados

- 2006: Chair, First Session of the IOC Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean Sea and Adjacent Regions, Bridgetown Barbados
- 2005: Vice Chair, Intergovernmental Oceanographic Commission (IOCARIBE) Board of Officer Meeting, Mexico City Mexico
- 2005: Participant, Workshop on the United Nations Convention on Chemical Weapons, Bridgetown, Barbados
- 2005: Delegate, Twenty-third Session of the United Nations Environment Programme Governing Council, Nairobi, Kenya
- 2005: Delegate, United Nations Commission for Sustainable Development (CSD 13), New York, USA
- 2005: Delegate, United Nations International Meeting to Review Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States, Port Louis, Mauritius
- 2004: Delegate, First Session of the African, Caribbean and Pacific Ministers of Environment, Brussels, Belgium
- 2004: Delegate, Regional Preparatory Meeting of the UNEP Governing Council, Panama City, Panama
- 2004: Delegate, Regional High Level Symposium on International Maritime Developments in the Caribbean, Barbados
- 2004: Participant, Fulbright Workshop on Leadership for Sustainable Development, Institute for Competitiveness and Sustainable Development (INCAE), Costa Rica
- 2004: Delegate, Eighth Intergovernmental Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions, Recife, Brazil
- 2004: Country Team Leader and Participant, Whitewater to Bluewater Partnership Conference, Florida, USA
- 2004: Participant, Diplomatic Conference of the International Maritime Organization, Ballast Water Convention, London
- 2003: Participant, Workshop for the Formulation of a Draft Project on Integrated Coastal Area Management (ICAM) for the Caribbean and Adjacent Regions, Cartagena, Colombia
- 2003: Participant, Diagnosis of Erosion of Caribbean Sandy Beaches Workshop, Kingston, Jamaica
- 2003: Delegate, International Maritime Organization, 49th Marine Environment Protection Committee Meeting, London
- 2003: Participant, Global International Waters Assessment Workshop, Santa Marta, Colombia
- 2003: Visiting Scientist and Presenter, Cariscience-Unesco, St Augustine, Trinidad
- 2003: Member, Iocaribe-GOOS Steering Committee Meeting, New Orleans, Louisiana
- 2003: Delegate, Seventeenth Session of the IOC Committee on International Oceanographic Data and Information Exchange, UNESCO Paris, France
- 2002: Participant, Regional Evaluation of Saltwater Intrusion in Coastal Aquifers, University of the West Indies, Barbados
- 2002: Participant, International Course on the Submarine Outfall Alternative for Final Disposal of Sewage for Coastal Cities in the Caribbean, University of the West Indies, Barbados
- 2002-Present: Vice Chair, IOC Sub-Commission for the Caribbean and Adjacent Regions (Iocaribe)

- 2002: Participant, Workshop on the development of Iocaribe Global Ocean Observing System (GOOS), Veracruz, Mexico
- 2002: Delegate, Seventh Intergovernmental Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions (Iocaribe), Veracruz, Mexico
- 2002: Delegate, Tenth Intergovernmental Session of the Caribbean Environment Programme of the United Nations Environmental Programme, Montego Bay, Jamaica
- 2002: Delegate, International Coral Reef Initiative, Cancun, Mexico
- 2001: Presenter, American Society for Limnology and Oceanography (ASLO) conference, Albuquerque, New Mexico
- 1999: Participant, Gulf Coast Geochemistry Group Conference (GC³), Louisiana Universities Marine Consortium
- 1998: Presenter, Conference on Marine Protected Areas, St Croix
- 1998: Participant, Workshop on Essential Fish Habitat and Marine Reserves, Mote Marine Lab, Sarasota, Florida
- 1998: Participant, Summer Institute in Coastal Management, Coastal Resources Center, University of Rhode Island, Narragansett, Rhode Island
- 1998: Participant, Conference on Ecology and Environmental Education, Kennedy School of Government, Harvard University, Massachusetts
- 1998: Participant, Conference of International Fulbright Scholars, Chicago, Illinois
- 1995: Participant, Consultation on Coastal Resource Management in the Tropical Americas, Montego Bay, Jamaica
- 1995: Session Co-Chair, Capacity Building, International Conference on International Coral Reef Initiative, Silliman University, Dumaguete City, Philippines
- 1994: Participant, Inter-American Development Bank Training Programme in Techniques for the Design and Conceptualization of Projects, Bridgetown, Barbados
- 1992: Presenter, Workshop on Management of Marine Protected Areas, St John US Virgin Islands

COMMUNITY SERVICE

- 2006-2010 Invited presenter on Coastal Hazards, District Emergency Organizations and Neighborhood Watch Associations, Barbados
- 2002: Member, Greening Barbados Committee
- 2002: Instructor, World Gym Barbados
- 1999-2000: Elected Vice President (Administration) International Cultural Center, Louisiana State University
- 2000-2001: Elected President, International Student Association/ International Cultural Center, Louisiana State University
- 1993-1996: Member, Barbados Hotel and Tourism Association Environmental Committee
- 1991-1996: Environmental education and awareness through lectures, slide shows and tours at colleges, schools, social clubs and groups
- 1991-1996: Participant, Beach cleanups, Coral reef cleanups with the Professional Diver Operators' Association
- 1991-1994: Member, Barbados Environmental Association

Inniss, Lorna V.

CERTIFICATIONS

2003: American College of Sports Medicine (ACSM) Fitness Instructor Course

2002: Project Management with Microsoft Project 2000

2001: Louisiana State University, Driver Safety Course

2001: Fitness and Program Instructor, Johnny G Spinning Program

2000: U.S. Dept. of Interior, National Park Service, Motorboat Operator Course

1996: Certificate in Computers – Capitol Business Solutions Inc.

1991: ACUC Open water SCUBA certification