Jan Mandrup-Poulsen, MS, MBA

QUALITY CONTROL/QUALITY ASSURANCE

- **EXPERIENCE HIGHLIGHTS**
  Lead role at FDEP during the formative stages of the TMDL Program

- **EDUCATION**
  MS • Biological Oceanography • Florida State University • 1980

  MBA • Florida State University • 1980

  BS • Atmospheric and Oceanic Science • University of Michigan • 1976

- **YEARS OF EXPERIENCE**
  Dewberry • 1

  Prior • 36

Mr. Mandrup-Poulsen is a highly experienced project manager and environmental scientist, with over 36 years of experience conducting and analyzing the results from water quality studies and the effects of pollutants in freshwaters, estuarine systems, and coastal waters throughout Florida. He has supervised and actively participated in the development and adoption, as regulatory rules, of more than 300 Total Maximum Daily Loads (TMDLs) for nutrients, dissolved oxygen, metals, and bacteria in Florida's lakes, rivers, springs, estuaries, and coastal waters. He has been a leader and a participant in the development of Reasonable Assurance (RA) Plans, Basin Management Action Plans (BMAPs), Alternative Restoration Plans, Use Attainability Analyses (UAAs), and was the Department's coordinator for the review and approval of Site-Specific Alternative Criteria (SSACs). In that capacity, he led several hundred public meetings and served as a facilitator for stakeholders and government agencies. In addition to having a lead role for the Department during the formative stages of the TMDL Program, he has managed numerous water quality management planning studies including an evaluation of nutrients and dissolved oxygen depletion in freshwaters and estuarine systems. Mr. Mandrup-Poulsen has co-authored materials on nonpoint source regulation and permitting guidance for point source discharges, and has provided testimony as an Expert Witness on matters related to water quality and water quality modeling. He has developed wasteload allocations for receiving waterbodies adjoining point source discharges using statistical and computer models. He has planned, supervised, and participated in numerous field sampling activities to collect water quality data, including field work to support development of models. He was the Department's NPDES industrial facility permit reviewer and aided in the securing of NPDES delegation for the state of Florida. Mr. Mandrup-Poulsen was an invited member on the National Research Council's committee to advise EPA and the U.S. Congress on "Assessing the TMDL Approach to Water Quality Management" (report published June, 2001). He has been a frequent invited speaker on a wide range of topics relating to water quality restoration policies and actions applied in Florida.

Senior Environmental Scientist, Dynamic Solutions, LLC, Tallahassee, FL. 2014-2019

Responsible for directing business activities for Dynamic Solutions in Florida. He was the project manager (PM) for the contract with Gainesville Regional Utilities to develop a Level II WQBEL for the GRU Main Street Wastewater Reclamation Facility's discharge to Sweetwater Branch, Gainesville, FL. Under a separate contract, and also the PM for the GRU John R Kelly power plant's Level II WQBEL project. In 2015-2016, Mr. Mandrup-Poulsen led a modeling project on the Kansas River, to support the Kansas Department of Health and Environment's TMDL development efforts. He also assisted Florida Power and Light with securing a renewal of the NPDES permit for their Ft. Myers facility, addressing elements of the Numeric Nutrient Criteria recently adopted in Florida. Served as Project Manager for the St. Johns River Water Management District contract to provide data analysis and management, environmental (hydrodynamic and water quality) modeling services, and water resources planning and project management for an aquifer restoration feasibility project in the Silver Springs/Ocklawaha River system in Marion

County, FL. Also served as the PM for the Northern District (hydrogeologic) Model update used to evaluate surface water/ground water interactions and set

minimum flows and levels in critical waters in North Central Florida, providing water resources planning, data analysis and management.

Environmental Administrator, Watershed Evaluation and TMDL Section, Florida Dept. of Environmental Protection, Tallahassee, Florida
From 1998-2013, oversaw Florida DEP Watershed Evaluation and TMDL staff responsible for determining Total Maximum Daily Loads (TMDLs) designed to restore impaired waterbodies and attain designated uses, evaluating surface water quality data, surface

Water /ground water interactions, and mixing zones for the State of Florida. Prepared annual lists of impaired Florida waterbodies [section 303(d) lists] for use in developing TMDLs and bi-annual section 305(b) water quality reports submitted to EPA. Staff under direct supervision developed, noticed, and adopted as rules more than 100 TMDLs for nutrients, dissolved oxygen, and bacteria in Florida's rivers, lakes, or coastal waters in the past four years. Key TMDLs developed included those using seagrass and light availability as ecological targets for the Indian River Lagoon, the Caloosahatchee Estuary, and Tampa Bay. In addition to TMDL studies, managed water quality management planning studies including an evaluation of nutrient enrichment and dissolved oxygen depletion in the Perdido River basin and Perdido Bay. Directly involved in all aspects of data collection, quality assurance checks, model selection, model enhancements, TMDL development, rule-making, and stakeholder coordination. Assisted in development of the implementation plans (BMAPs), including subsequent monitoring, for determining restoration progress in Florida. Co-directed activities of a Technical Advisory Committee tasked to develop a methodology for determining impaired waters in Florida. Drafted rule language from this 18-month effort that became final in June, 2002 and which now serves as a national model for assessing surface water quality. Assisted in preparing "A Report to the Governor and the Legislature on the Allocation of Total Maximum Daily Loads in Florida" submitted to the Florida Legislature in February, 2001. Developed monitoring plans to assess water quality and biological impacts from a wide range of point and nonpoint sources, including wastewater treatment plants, electrical generation facilities, phosphate mining and beneficiation plants, ground water sources, and atmospheric deposition. Led the effort to complete a statewide mercury TMDL, calling for reductions in atmospheric mercury, affecting freshwater and marine fish species.

Mr. Mandrup-Poulsen served as member of Florida Department of Environmental Protection's (DEP) team charged with developing Pollutant Trading rule language for impaired surface waters. He co-authored materials on nonpoint source regulation in Florida and a permitting guidance document for point source discharges in Florida, with consideration of the TMDL program. Served as Florida DEP contact for evaluating new desalination/demineralization projects located in Florida and prepared agencywide guidance to implement toxicity rules in NPDES permits. Provided testimony as an Expert Witness on matters related to water quality and water quality modeling. Duties also included supervision of a staff of 28 employees, over-seeing contractual work, project management, public outreach, and training. Served as frequent public speaker on topics relating to Florida DEP's watershed management approach, TMDLs, and the Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). Invited as speaker at the 1999 ASAE/CSAE-SCGR Annual International Meeting in Toronto, Canada to present "Florida's Plan for Implementation of Nonpoint Source Components of Total Maximum Daily Loads." Served as member of the Gulf of Mexico Alliance's (GOMA) team tasked to address nutrient impairments, fecal indicators, and mercury issues.