

EXHIBIT A

Sampling and Field Observation Summary Report - DR. MATTHEW FINN

1. I am Dr. Matthew Finn. I hold a Ph.D. specializing in marine biology - mangroves. I have served as research scientist focusing on water quality for Georgetown University 1970-90s, Smithsonian Institution – Marine Systems Lab 1986-1996, National Marine Fishery Services 1998-2006, and have authored or co-authored several papers on marine and fresh water quality issues. A copy of my CV is attached.
2. Volunteers from Friends of the Lower Keys (FOLKs), a Keys-wide water quality advocacy group, and I have located what appear to be contaminated sewage effluent upwellings into the Florida Keys National Marine Sanctuary waters in Safe Harbor, Stock Island, in very close proximity to KW Resort Utility Corp (KWRU) shallow sewage wells.
3. FOLKs requested my assistance in diving the shallow waters off KWRU where surface water disturbance had been reported. Taking extra sanitary precautions, I made numerous dives using SCUBA over the course of 2024-2025.
4. I took underwater video, stills, as well as water samples which have been analyzed for sucralose by the EARL Laboratory at Florida International University. I also performed field analyses for comparative salinity and water temperature.
5. I have reviewed and approved the laboratory test analyses from these dives and chain of custody documents which are **Exhibit B**.
6. Since the wells are not used at times when the sewage effluent is used to water the Key West golf course, FOLKs volunteers and I dropped a piece of rebar tied with several pieces of yellow polypropylene line in the water where I was sampling. We also installed a submerged on-line video camera at the same time.

7. The yellow pieces would float upwards on the rebar when there was greater flow from the upwellings. Flows were visible from the upwellings even when the yellow line was not rising upward.
8. I saw the upwelling area both when the yellow line was rising upward and when it was not. On one occasion, a manatee almost bumped into me when I was sampling, heading straight to the upwellings.
9. I have observed manatees accessing and drinking directly from the upwellings and have found that manatees frequently visit the site.
10. There was a significant temperature and salinity difference between the water from the upwellings and the surrounding seawater. The upwelling water was significantly less saline by an average 4 ppt. and often there was a difference in temperature of several degrees Fahrenheit between the upwellings and the nearby water.
11. The upwellings are within a depression in the sea bottom with approximate dimensions 40 x 43 x 8 feet. The base of the depression where the upwellings are found is small rocks with no sea grass, while the sea bottom adjacent to the depression is silty.
12. The center of the upwelling depression is about 55 feet from the closest shore of Safe Harbor and about 300 feet from the KWRU shallow sewage wells.
13. The analyses of the water samples by EARL laboratory at Florida International University showed sucralose at very high concentrations. On all sampling dates in 2025, sucralose levels from samples at the upwellings ranged from 3,147 ng/L to 15,880 ng/L. Sucralose concentrations from samples 1 foot below the top of the surface water over the upwellings ranged from 837 ng/L to 1,908 ng/L.
14. These very high concentrations of sucralose - higher concentrations at the mouth of the upwellings than at the top of the surface water - indicate the presence of sewage effluent entering the embayment of Safe Harbor and nearshore Sanctuary waters.

15. In my professional opinion:

- a. The data demonstrate that the sampled upwellings are discharging groundwater contaminated with sewage effluent to the surrounding and downstream Sanctuary and State surface waters.
- b. Based on my experience and knowledge of well-accepted field studies and other literature, sewage effluent will cause damaging effects to the marine environment from the primary producers (algae and seagrasses) up the trophic ladder from microbiota, invertebrates -including coral - and vertebrates – including fishes and turtles - to the marine mammals and humans.



Matthew Finn, Ph.D. 7-2-2025

Curriculum Vitae -Matthew Finn, Ph.D.

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EDUCATION:

Ph.D. 1996, Georgetown University, Department of Biology

B.S. 1983, Georgetown University, Department of Biology

ADDITIONAL PROFESSIONAL CERTIFICATIONS:

2015-present	Certified Senior Ecologist – Ecological society of America
2012- present	NOAA – ONMS Authorization #FKNMS – 2012-108 etc.
1999- 2021	FFWCC Authorized Gopher Tortoise Agent #GTA -09-00233A
2001- 2024 #1291	Professional Wetlands Scientist, Society of Wetland Scientists
1997 - 2024	US Coast Guard Captain, 100 Ton Master, #840275
1986 - 2006	SCUBA Instructor: PADI Instructor, #33987

EMPLOYMENT:

2003- Present President, Huckleberry Environmental Services, Inc.

Environmental consulting, project management and oversight; Underwater, wetland and upland mitigation services; gopher tortoise relocation; Burrowing owl and migratory bird studies and relocation, exotic removal; tree service; aquaculture, coral assessment and relocations, water quality monitoring.

1999- 2008 Consulting Ecologist, Key Marco Community Association

Develop and oversee gopher tortoise management plan.

1996 - 2014 President, Huckleberry Fisheries

Commercial production of mullet, pompano, stone and blue crabs, marine life.

1998 - 2006 Research Scientist, National Marine Fisheries Service

Study effects of water quality on marine turtles, grouper and essential fish habitat.

1996 - 2005 Faculty Research Associate, NRM Program, University of Maryland

Assist with Natural Resource Management marine construction research projects.

1997 - 1999 General Biologist II, National Wetlands Research Center

Establish and monitor wetland sedimentation and subsidence stations in Florida.

1990 - 1995 Research Ecologist, Space Biospheres Ventures

Establish Florida Everglades field stations. Coordinator for Biosphere 2 research programs and aquatic systems: million gallon coral reef, mangrove estuary, tropical streams, waste treatment marshes, rice paddy and fish culture.

1986 - 1992 Research Scientist, Smithsonian Institution, Marine Systems

Laboratory Establishment and management of Smithsonian living ecosystem models for the Chesapeake Bay, Everglades, Coral Reef. Background research and writing for grant proposals. Manage stream survey and biotic index development team. Scanning electron microscopy of Everglades periphyton. Chief engineer and dive officer.

PUBLICATIONS:

Finn, M., A. Eklund, J. Schull and J. Evans. 2004. Linkage of water quality and biota in the tidal river and canal system of the ten thousand islands estuaries: Baseline studies preceding hydrologic restoration of southern golden gate estates. In: Cannizzaro, P.J., editor. Proceedings of the thirty first annual conference on ecosystems restoration and creation. Hillsborough Community College, Tampa, Florida.

Eklund, A., Wong, S., Schull, J. and M. Finn. 2002. Nassau Grouper and Jewfish Habitat. A final report to the National Fish and Wildlife Foundation.

Finn, M., A. Eklund and J. Schull. 2000. Water Quality Monitoring of Tidal River and Canal Systems in the Ten Thousand Islands Estuaries: Implications for Essential Fish Habitat and Watershed Dynamics. Abstr. Greater Everglades Ecosystem Restoration (GEER) Science Conference.

Eklund, A., C. Koenig, F. Coleman, T. Bevis and M. Finn. 1999. Juvenile Jewfish Distribution and Abundance in Altered and Unaltered Habitats of the Ten Thousand Islands of Southwest Florida. Abstr. Florida Bay and Adjacent Marine Systems Science Conference.

Finn, M., P. Kangas and W. H. Adey. 1999. Mangrove ecosystem development in Biosphere 2. *Ecological Engineering* **13**: 173-178.

Nelson, M., M. Finn, C. Wilson, P. Hawes, M. van Thillo, R. Fernandez and B. Zabel. 1999.

Bioregenerative recycle of wastewater in Biosphere 2 using a created wetland: 2 year results. *Ecological Engineering* **13**: 189-197.

Finn, M., J. Iglehart and P. Kangas. 1998. A taxonomy of spatial forms of mangrove dieoffs in southwest Florida. In: Cannizzaro, P.J., editor. Proceedings of the twenty fourth annual conference on ecosystems creation and restoration. Hillsborough Community College, Tampa, Florida.

- Finn, M. 1996. The mangrove mesocosm of Biosphere 2: design, establishment and preliminary results. *Ecological Engineering* **6**: 21-56.
- Adey, W., M. Finn, P. Kangas, L. Lange, C. Luckett and D. Spoon. 1996. A Florida Everglades mesocosm - model veracity after four years of self-organization. *Ecological Engineering* **6**: 171-224.
- Finn, M. 1996. Comparison of mangrove forest structure and function in a mesocosm and Florida. Ph.D. dissertation, Georgetown University, Washington D.C.
- Finn, M. 1994. Modeling mother nature. *World and I Magazine* **11**: 210 -217.
- Finn, M. and W. Adey. 1992. Looking for life's essence. *Lighting Design and Application Magazine* **22**: 24-29.
- Adey, W., M. Finn, and M. Smith. 1992. Water quality in the streams and marshes of Fort Belvoir based on a higher plant, rapid bioassay. Report to Department of Defense Heritage program, #EA 7920383.
- Finn, M. and W. Adey. 1991. Mesocosms: Encapsulated ecosystems on display. *Sea Technology* **32**: 85-88.
- Stribling, S., M. Finn, P. Thaler, and D. Spoon. 1990. Nineteen Eighty Nine Maryland Anacostia River study: Part one - habitat. Macro-benthic Invertebrate Communities and water quality assessment. Report to the Interstate Commission on the Potomac River basin.

PROFESSIONAL ORGANIZATIONS:

- American Academy of Underwater Sciences (AAUS)
- American Association for the Advancement of Science (AAAS)
- American Geophysical Union (AGU)
- Ecological Society of America (ESA)
- Estuarine Research Federation (ERF)
- Florida Academy of Sciences (FAS)
- Professional Association of Diving Instructors (PADI)
- Sigma Xi, Scientific Research Society
- Society of Wetland Scientists (SWS)
- Undersea Hyperbaric and Medical Society (UHMS)

ADDITIONAL RELATED PROJECTS:

1986- present wildlife	South Florida upland & underwater surveys, plants, soils and
2003- present	Mangrove restortation; Marco, Naples, Keywadin, Capri, FL Keys
2007- present	Beach/dune restoration; Marco, Keywadin, Naples
2008	Uplands restoration on Keywadin Island
2005- 2021	Burrowing owl and gopher tortoise research, Marco Island, Florida
1995 - present wetlands	Research Collaborator; Smithsonian Institution: Corals and
1992 - present	Establish, maintain and research mangrove forest stations, Florida
1992 - 2002	Research Collaborator, Rookery Bay, Estuarine Research Reserve
1999	Establishment of mangrove ecosystem, Columbus Ohio Zoo
1996	Hydrogeomorphic (HGM) wetland assessment/delineation training
1996	Reef, estuary and stream biotic and chemical assessments in Brazil
1994 - 1996	Chairman: Scientific Diving Control Board, Biosphere 2
1993	Coral Reef study and collections, Puerto Rico
1991	Coral Reef study, Australia and Papua New Guinea
1991 - 1992	Special Training on Scanning Electron Microscope
1989 - 1990	Crab Mariculture USAID project, Grand Turk, BWI
1988 - 1992	Diving officer and control board, Smithsonian Institution
1987 - 1996	Coral Reef study and collections, Florida, Bahamas, Mexico
1987 - 1992	Chief Engineer: R/V Marsys Resolute