#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Application for certificate to provide wastewater service in Charlotte County by Environmental Utilities, LLC.

DOCKET NO.: 20240032-SU

FILED: November 1, 2024

# NOTICE OF FILING PRE-FILED TESTIMONY OF JOHN SHAW ON BEHALF OF LITTLE GASPARILLA ISLAND PRESERVATION ALLIANCE, INC.

Pursuant to the Order Establishing Procedure, issued August 12, 2024, Little Gasparilla Island Preservation Alliance, Inc. ("LGIPA"), through undersigned counsel, submits the following pre-filed testimony of John Shaw on behalf of LGIPA.

Dated: November 1, 2024 /s/Valerie L. Chartier-Hogancamp

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Counsel for Little Gasparilla Island Preservation Alliance, Inc.

# BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Application for certificate to provide wastewater service in Charlotte County by Environmental Utilities, LLC.

DOCKET NO.: 20240032-SU

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# DIRECT TESTIMONY OF JOHN SHAW

on behalf of Little Gasparilla Island Preservation Alliance, Inc.

2 A: John Thomas Shaw 3 State your profession and current employer. Q: 4 A: Civil Engineer, John Shaw Consulting, LLC 5 Q: State your professional address. 6 A: 1887 Whitney Mesa Dr., Henderson, NV 89014 7 Briefly state your education, including degrees earned, following high school. Q: Bachelor of Science, Civil Engineering, University of Nevada, Reno (1988) 8 A: 9 Q: Do you hold any professional licenses? If so, please state the license and jurisdiction. 10 Registered Professional Engineer in 35 states including Florida 11 A: 12 Q: What is your area of professional expertise? 13 A: Wastewater and Water Utilities including planning, design, operation and maintenance, 14 management and regulatory compliance. Briefly state your professional experience in that area of expertise. 15 Q: Over 37 years working exclusively in the water and wastewater utility industry as a 16 A: 17 professional engineer, operator, manager and consultant. 18 Q: Have you ever testified as an expert witness? 19 Yes, I've testified at trial, both bench and jury over two dozen times, testified in front A: 20 of arbitration panels and been deposed more than fifty times. Briefly describe the nature of your experience as an expert witness. 21 Q: 22 I have been accepted as an expert witness in several state and federal courts and have A: 23 testified and/or been deposed over fifty times. All of my forensic work has been 24 deposed over fifty times. All of my forensic work has been exclusively in the water and wastewater utility industry. 25

1

Q:

State your full name.

- 1 A: I have been accepted as an expert witness in several state and federal courts and have
  2 testified and/or been deposed over fifty times. All of my forensic work has been
  3 exclusively in the water and wastewater utility industry.
- 4 Q: Have you reviewed Environmental Utilities' ("EU") Application for Original

  Certificate of Authorization for a Proposed or Existing System Requesting Initial
- 6 Rates and Charges ("Application")?

(dated January, 2024)?

- 7 A: Yes.
- 8 Q: Did you review the Exhibit to EU's Application titled "Accounting Information"
- 10 A: Yes.

9

- 11 Q: Did that exhibit contain seven separate "Schedules" of accounting information,
- including subparts?
- 13 A: Yes.
- 14 Q: Did you find any deficiencies in any of the Schedules of the Accounting
- 15 **Information?**
- I believe there are omissions in EU's calculations. There are several costs associated 16 A: 17 with the project, both capital and on-going that were not obviously included in the work or were included but are not currently accurate. It is my understanding that the cost 18 estimates used in the "Accounting Information" were originally developed and 19 20 presented in a report by Giffels-Webster Engineers, Inc. (GWE) in early 2021. I asked that a current unit cost estimate be compiled from local (Southwest Florida) public 21 22 works projects of similar scope, since this would provide the most accurate estimate of 23 project costs, and the information is publicly available. The results of that effort are 24 included in Exhibit JDH-2, as attached to Jadon Hull's testimony. I have used that 25 Exhibit's information in my following opinions. In addition to the costs discussed

1		below and included in the "Accounting Information" are the costs that will be levied
2		by the County against either EU or its customers. These costs include, but may not be
3		limited to:
4		1. Connection Fee \$11,201.00
5		The current connection fee is proposed to be increased per the County's recent rate
6		study, to \$30,579.00, however there are elements of that fee which should not be
7		charged to the subject customers, such as a \$13,000 charge for the installation of a LPS
8		facility.
9		2. Conveyance Fee \$ TBD
10		The total project cost for the "Master Pump Station" and associated force main
11		described in the GWE report is not included in any of the costs projections for the
12		proposed services. Whatever the costs, the County will surely pass that on to the subject
13		customers in additional connection fee as well as potentially a surcharge to the monthly
14		fee for operation and maintenance costs.
15		Current estimate of construction costs, connection fees, usage fees, etc. are discussed
16		below.
17	Q:	For "Schedule 1B," describe the deficiencies.
18	A:	Item 6: Collecting Wastewater – Force \$3,844,283
19		The current (2024) estimated cost of construction for the force main portion of the
20		project is: \$7,116,745.00
21		Item 14: Pumping Equipment \$13,467,376
22		The current estimated cost per unit for the supply and installation of the proposed pump
23		stations is: \$9,450.00
24		Based upon the number of customers included in the "Accounting Information"
25		(1,248), the extended cost to supply and install the proposed pump stations is:

1			\$21,168,000	
2		In addition, what is apparently not included in the "Accounting Information" costs are:		
3		1. Abandon existing septic tank in place (per unit):	\$5,000.00	
4		2. General Conditions and appurtenances (lump sum):	\$5,287,399.85	
5		3. Markup (for materials and costs for work on barrier islands) (50% of estimated		
6		construction cost):	\$14,138,047.43	
7	Q:	For "Schedule 3B," describe the deficiencies. <sup>1</sup>		
8	A:	Item 34: Average cost per customer per month	\$82.85	
9		There is apparently no account for:		
10		1. The cost associated with conveyance by the County from the main	pump station to	
11		the POTW		
12		2. The cost associated with the treatment of the wastewater by the Co	ounty.	
13		3. The cost of disposal of the wastewater by the County.		
14	Q:	For "Schedule 4B," describe the deficiencies. <sup>2</sup>		
15	A:	Item 12: Future Customers (ERC) to be Connected	1,248	
16		The GWE report shows 1,251 connections (pg. 43 of 63)		
17		Item 17: Requested Service Availability Charge Per ERC	\$14,512.55	
18		Based upon the current estimated cost of construction, not include	ling the County	
19		connection fee and costs for conveyance, the subtotal cost for service	per ERC (1,251	
20		units) is:	\$46,189.79	
21	Q:	For "Schedule 5," describe the deficiencies.		
22	A:	Item 2: Sewer Lateral Cost	\$1,789,151	
23		Item 4: Sewer Lateral Installation Fee	\$1,433.61	

The "Accounting Information" exhibit does not contain a "Schedule 3A."

The "Accounting Information" exhibit does not contain a "Schedule 4A."

1		The GWE report lists an "On Site Lateral Connection" per unit cost of:	\$1,000.00	
2		(pg. 20 of 63). The estimated current cost to install the sewer service laterals (on site)		
3		is:	\$2,000.00	
4	Q:	For "Schedule 7" describe the deficiencies.		
5	A:	Item 3: Base Facility Charge	\$88.78	
6		Item 4: Gallonage Charge, 10,000 gallons cap	\$28.35	
7		These two charges combined (\$117.13) represent, it is assumed, the typi	cal monthly	
8		charge per customer. This does not including the charges levied by the	County for	
9		transmission, treatment and disposal of the wastewater. At present, the	ne County's	
10		average monthly water and sewer bill (the County bills the two service	s as one) is	
11		\$121.53, however the fees are expected to increase to \$170.45 by the year	2029, based	
12		upon the recommendations of a recent rate study by the County.		
13	Q:	For "Accounting Schedules, DDS-1, Page 11 of 21" describe the deficie	encies.	
14	A:	The Asset Life utilized for the LPS Tank installation, which includes the	e associated	
15		pumps is 18 years. The GWE Report states that the life expectancy is on	ly seven (7)	
16		years (GWE Report, Appendix B, pg. 40).		
17	Q:	Are you sponsoring any exhibits?		
18	A:	Yes. Exhibit JS-1: Current CV of John Shaw, P.E.		
19	Q:	Did you prepare these exhibits or were they prepared under your supe	ervision?	
20	A:	Yes.		
21	Q:	Does that conclude your testimony?		
22	A:	Yes.		

John Shaw, P.E.

John Shaw Consulting, LLC

Water, Wastewater, Hydraulic & Forensic Engineering

530.550.1576 www.shaweng.com john@shaweng.com



#### Education

B.S. — Civil Engineering — University of Nevada, Reno — 1988

# **Professional Work History**

**2000 – Present: John Shaw Consulting, LLC:** Provide Civil Engineering including design, planning and consulting on construction operations and maintenance, regulatory compliance and management services specific to the water and wastewater industry and consulting and expert witness testimony for attorneys. Have lived and/or worked in many of the United States as well as Jamaica, Mexico, Scotland, England, Spain, France, Italy, Honduras, Columbia, Belarus and Canada.

1986 – 2000: Shaw Engineering, Ltd.: President. Owned and managed this company until October 2000, when it was sold to two of the Principal Engineers. Through Shaw Engineering, Ltd., was involved in a diverse list of projects including water and wastewater planning, treatment, conveyance, collection, rehabilitation re-use and disposal facilities including planning, design, construction and contract management, operations, safety, and regulatory requirements. Through Shaw Engineering, Ltd., was appointed City Engineer for the City of Lovelock, and in 1989 provided that service as well as serving as the City Building official until 1999. Later, provided these services as well to Lander County, Nevada. More recent projects include: Duraflex International — Industrial Wastewater Treatment and Disposal Facility, Alpine Springs County Water District, Gold Mountain Community Services District, Pine Ridge Water Company (Nos. 1 & 2), Matthew's Ranch Wastewater Treatment and Disposal Facility, Quill Ranch Water Treatment Plant, Grand View Terrace Water



April 1, 2024

Company, City of Lovelock Wastewater Treatment Facility (SBR); Lander County Public Safety Facility Construction Management; Battle Mountain Wastewater Treatment Plant; Lander County Humboldt and Reese River Contaminant Modeling; Lander County Pool Rehabilitation; CDB Effluent Reuse Facility-Hydraulic Analysis; Silver Lake Water Company System Mapping; Northstar Summit Deck & Grille; Sky Vista Sewage Lift Station and Force Main; Washoe County Utility Division, Southern Washoe County Sewer and Water Utility System Mapping; Incline Village GID Burnt Cedar Beach Pool Rehabilitation; and numerous others.

**1988 – 1995: SPB Utility Services, Inc.:** Secretary/Treasurer. SPB is an operations company that provides contract operations, and operations and maintenance consulting services throughout the State of Nevada. As the Secretary of the corporation, was responsible for all of the local (Reno, Sparks, Washoe County) operations, employees and clients, as well as regulatory compliance, including OSHA, at all the facilities for which the company was responsible.



### Registration and Certification

- Professional Engineer Arizona No. 53314 (Exp. 6/30/26)
- Professional Engineer California No. 61007 (Exp. 12/31/2024)
- Professional Engineer Colorado No. 0061966 (Exp. 10/31/2025)
- Professional Engineer Florida No. 75839 (Exp. 2/28/2025)
- Professional Engineer Georgia No. PE037277 (Exp. 12/31/2024)
- Professional Engineer Guam No. CE1579 (inactive)
- Professional Engineer Hawaii No. PE-18099 (Exp. 4/30/2026)
- Professional Engineer Idaho No. P-7239 (Exp. 2/28/2025)
- Professional Engineer Indiana No. PE11500484 (Exp. 7/31/2024)
- Professional Engineer Kentucky No. 33630 (Exp. 6/30/24)
- Professional Engineer Maine No. 14315 (Exp. 12/31/2025)
- Professional Engineer Maryland No. 41666 (Exp. 3/8/2024)
- Professional Engineer Massachusetts No. 51069 (Exp. 6/30/2024)
- Professional Engineer Michigan No. 6201058395 (Exp. 10/06/2025)
- Professional Engineer Missouri No. 2015025033 (Exp. 12/31/2025)
- Professional Engineer Montana No. 37158 (Exp. 6/30/2024)
- Professional Engineer Nevada No. 10023 (Exp. 6/30/2024)
- Professional Engineer New Jersey No. 24GE06001500 (Exp. 4/30/26)
- Professional Engineer New Mexico No. 12490 (12/31/2024)
- Professional Engineer New York No. 091457-1 (Exp. 1/31/2024)
- Professional Engineer North Carolina No. 040104 (Exp. 12/31/2024)
- Professional Engineer Ohio No. 74995 (Exp. 12/31/2025)
- Professional Engineer Pennsylvania No. PE094670 (Exp. 9/30/25)
- Professional Engineer Oregon No. 72270PE (Exp. 6/30/2024)
- Professional Engineer Tennessee No. 119612 (Exp. 11/30/2024)
- Professional Engineer Texas No. 116372 (Exp. 12/31/2024)
- Professional Engineer Utah No. 9527644-2202 (Exp. 3/31/2025)



- Professional Engineer Vermont No. 7856 (Exp. 7/31/2024)
- Professional Engineer Virginia No. 0402051190 (Exp. 8/31/2024)
- Professional Engineer Washington No. 48470 (Exp. 2/21/2026)
- Professional Engineer Washington DC No. PE908753 (Exp. 8/31/2024)
- Professional Engineer Wisconsin No. 40270-006 (Exp. 7/31/2024)
- Dispute Resolution Board Foundation Member
- Professional Reviewer and Expert Witness for the Oregon Board of Examiners for Engineering & Land Surveying
- NCEES Records Program 19794
- United Nations Consultants Roster Member
- United States Council for International Engineering Practice Certificate No. 19794
- AWWA Certification Grade IV Water Treatment Plant Operator No. 276
- AWWA Certification Grade IV Water Distribution Operator No. 430
- WEF Certification Grade IV Wastewater Treatment Plant Operator No. NV-322
- California DHS Certification Grade V Water Distribution System Operator No. 7225
- Nevada State Health Certification Grade IV Water Treatment Plant Operator No. 207 (inactive)
- Nevada State Health Certification Grade IV Water Distribution Operator No. 430 (Inactive)
- State of Nevada Certification Grade IV Wastewater Treatment Plant Operator No. NV-322 (Exp. 4/10/2020)
- OSHA Confined Space Safety Certification (29 CFR 1910.146, 1926.1001, 1915.1001)
- Certified Inspector Polyethylene Fusion, McElroy University (Exp. 12/04/2014)



April 1, 2024

#### **Publications**

- Water Environment Federation (2021) Lift Station Technical Report/White Paper; WEF Press: Alexandria, Virginia. Co-Author
- Water Environment Federation (2016) Operation of Water Resource Recovery Facilities,
   7th ed.; Manual of Practice No. 11; WEF Press: Alexandria, Virginia. ISBN # 978-1-25-985936-6, Co-Author
- Water Environment Federation (WEF) "Guide for Municipal Wet Weather Strategies,"
   Reviewer
- Water Environment Federation (WEF) "Wet Weather Design and Operation," Reviewer
  This publication addresses both wastewater treatment plant design and operations
  practices related to wet weather flows and it expands on the peculiarities of wet weather
  from both design and operational perspectives.
- "Wastewater Collection Systems Management," Manual of Practice No. FD-17
- "Collection Systems Operator's Guide to Preparing for the Certification Examination,"
   Co-Author
- Water Environment Federation (WEF) Operation of Municipal Wastewater Treatment Facilities (MOP 11, 6<sup>th</sup> Edition), Reviewer
- Water Environment Federation (WEF) Wastewater Treatment Operator Training Manual, Co-Author, Reviewer
- National Association of Sewer Service Companies (NASSCO) "Specification For Sewer Line Cleaning," Co-Author
- Water Environment Federation (WEF) Sanitary Sewer Systems: Lift Station Fact Sheet (2019), Author: Operation & Maintenance, Data Management



#### Affiliations & Memberships

- Water Environment Federation (WEF) Sewer Collection Systems Committee Member
- American Water Works Association (AWWA CA/NV) Asset Management Committee -Member
- Water Environment Federation (WEF) National Sewer Collection Systems Committee -Member
- North Carolina AWWA-WEA Collection & Distribution Systems Committee
- American Membrane Technology Association Member
- University of Nevada, Reno, Department of Civil Engineering Curriculum Advisory Board Member
- American Water Works Association Member #233221
- AWWA, Illinois Section Water System Distribution Committee Member
- International Water Association (IWA) Member
- Forensic Expert Witness Association (FEWA) Member
- Tahoe Truckee Sanitary Agency (TTSA) Board of Directors (2002-2005)
- Washoe County Health Department Sewage, Water, and Sanitation Hearing Board Member (appointed 1993-1998)
- Tahoe-Truckee Engineers Association
- Volunteers for Overseas Cooperative Assistance (VOCA) Volunteer
- Water for People International Volunteer
- American Society of Civil Engineers
- National Society of Professional Engineers
- National Association of Corrosion Engineers Member #6896-00
- American Backflow Prevention Association Member #Q1245
- Water Environment Federation Member #1645765 (Exp. 4/30/2018)
- National Association of Sewer Service Companies (NASSCO) Member (Exp. 12/31/2015)
- NASSCO Industry Standards Committee Member
- NASSCO Infrastructure Condition Assessment Committee Member
- World Toilet Organization

