LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

AGENDA
REGULAR MEETING #07-2021
FEBRUARY 18, 2021 – 7:00 PM AT DISTRICT OFFICES
ALSO, THE MEETING WILL BE AVAILABLE TO THE PUBLIC ONLINE AT: LOXAHATCHEERIVER.ORG/PUBLICMEETING

1. Call to Order & Pledge of Allegiance
2. Administrative Matters
   - A. Roll Call
   - B. Previous Meeting Minutes Page 3
   - C. Additions and Deletions to the Agenda
3. Comments from the Public
4. Status Updates
   - A. Loxahatchee River Watershed Page 10
   - B. Loxahatchee River District Dashboard Page 11
5. Consent Agenda (see next page) Page 12
6. Regular Agenda
   - A. Consent Agenda Items Pulled for Discussion
   - B. Rules Chapter 31-10; Rates, Fees and Charges (Rate Study) Page 75
7. Reports (see next page) Pulled for Discussion
8. Future Business Page 123
9. Board Comments
10. Adjournment

"...if a person decides to appeal any decision made by the Board, with respect to any matter considered at such meeting or hearing, he/she will need a record of the proceedings, and that, for such purpose, he/she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based."

Submitted by:
Date: February 11, 2021

2500 Jupiter Park Drive
Jupiter, Florida 33458

TEL: (561) 747-5700

FAX: (561) 747-9929

loxahatcheeriver.org

5. CONSENT AGENDA

All items listed in this portion of the agenda are considered routine and will be enacted by one motion. There will be no separate discussion of these items unless requested by a Board member or citizen; in which event, the item will be removed and considered under the regular agenda.

A. Operational Greenhouse Gas Emissions and Cost Assessment – to award engineering services contract Page 13
B. LS163 Emergency Generator – to award construction contract Page 31
C. IQ511 Pump Station Piping Modifications – to award construction contract Page 34
D. Master Lift Station Bypass Study – to award engineering study contract Page 41
E. Replacement Portable Generator – to approve purchase Page 63
F. Public Participation at LRECD Public Meeting Policy – to approve policy Page 67
G. Fixed Asset Disposal – to approve disposal Page 72
H. Change Orders to Current Contracts – to approve modifications Page 73

7. REPORTS

A. Neighborhood Sewering Page 81
B. Legal Counsel's Report Page 83
C. Engineer's Report Page 85
D. Busch Wildlife Sanctuary Page 91
E. Director's Report Page 92

LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: Governing Board

FROM: Recording Secretary

DATE: February 8, 2021

RE: Approval of Meeting Minutes

Attached herewith are the minutes of the Public Hearing and Regular Meeting of January 21, 2021. As such, the following motion is presented for your consideration.

"THAT THE GOVERNING BOARD approve the minutes of the January 21, 2021 Public Hearing and Regular Meeting as submitted."

J:\BOARD\MinutesSamples\MinutesMemo2020.docx

2500 Jupiter Park Drive
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loxahatcheeriver.org

Ref. 01-2021

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT
PUBLIC HEARING – MINUTES
JANUARY 21, 2021

1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Chairman Rockoff called the Public Hearing of January 21, 2021 to order at 6:59 P.M.

2. ROLL CALL

The following Board Members were in attendance:

Mr. Rockoff
Dr. Rostock (via GotoWebinar)
Mr. Snyder
Mr. Boggie

3. TO RECEIVE PUBLIC COMMENTS PERTAINING TO ISLAND COUNTRY ESTATES FINAL ASSESSMENT

No comments from the public were received.

4. COMMENTS FROM THE BOARD

No comments from the Board were received.

5. ADJOURNMENT

Chairman Rockoff adjourned the Public Hearing at 7:00 P.M.

_____ _____
BOARD CHAIRMAN BOARD SECRETARY

_____
RECORDING SECRETARY

Ref. 02-2021

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT
PUBLIC HEARING – MINUTES
JANUARY 21, 2021

1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Chairman Rockoff called the Public Hearing of January 21, 2021 to order at 7:00 P.M.

6. ROLL CALL

The following Board Members were in attendance:

Mr. Rockoff
Dr. Rostock (via GotoWebinar)
Mr. Snyder
Mr. Boggie

7. TO RECEIVE PUBLIC COMMENTS PERTAINING TO WHISPERING TRAILS AMENDED FINAL ASSESSMENT

No comments from the public were received.

8. COMMENTS FROM THE BOARD

No comments from the Board were received.

9. ADJOURNMENT

Chairman Rockoff adjourned the Public Hearing at 7:01 P.M.

_____ _____
BOARD CHAIRMAN BOARD SECRETARY

_____
RECORDING SECRETARY

Ref. 03-2021

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT
PUBLIC HEARING – MINUTES
JANUARY 21, 2021

1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Chairman Rockoff called the Public Hearing of January 21, 2021 to order at 7:01 P.M.

10. ROLL CALL

The following Board Members were in attendance:

Mr. Rockoff
Dr. Rostock (via GotoWebinar)
Mr. Snyder
Mr. Boggie

11. TO RECEIVE PUBLIC COMMENTS PERTAINING TO NEW PALM BEACH HEIGHTS AMENDED FINAL ASSESSMENT

No comments from the public were received.

12. COMMENTS FROM THE BOARD

No comments from the Board were received.

13. ADJOURNMENT

Chairman Rockoff adjourned the Public Hearing at 7:02 P.M.

_____ _____
BOARD CHAIRMAN BOARD SECRETARY

_____
RECORDING SECRETARY

Ref. 04-2021

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT
PUBLIC HEARING – MINUTES
JANUARY 21, 2021

1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Chairman Rockoff called the Public Hearing of January 21, 2021 to order at 7:02 P.M.

14. ROLL CALL

The following Board Members were in attendance:

Mr. Rockoff
Dr. Rostock (via GotoWebinar)
Mr. Snyder
Mr. Boggie

15. TO RECEIVE PUBLIC COMMENTS PERTAINING TO IMPERIAL WOODS AMENDED FINAL ASSESSMENT

No comments from the public were received.

16. COMMENTS FROM THE BOARD

No comments from the Board were received.

17. ADJOURNMENT

Chairman Rockoff adjourned the Public Hearing at 7:03 P.M.

_____ _____
BOARD CHAIRMAN BOARD SECRETARY

_____
RECORDING SECRETARY

Ref. 05-2021

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT
PUBLIC HEARING – MINUTES
JANUARY 21, 2021

1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Chairman Rockoff called the Public Hearing of January 21, 2021 to order at 7:03 P.M.

18. ROLL CALL

The following Board Members were in attendance:

Mr. Rockoff
Dr. Rostock (via GotoWebinar)
Mr. Snyder
Mr. Boggie

19. TO RECEIVE PUBLIC COMMENTS PERTAINING TO US HIGHWAY 1 RESIDENTIAL AMENDED FINAL ASSESSMENT

No comments from the public were received.

20. COMMENTS FROM THE BOARD

No comments from the Board were received.

21. ADJOURNMENT

Chairman Rockoff adjourned the Public Hearing at 7:04 P.M.

_____ _____
BOARD CHAIRMAN BOARD SECRETARY

_____
RECORDING SECRETARY

Ref: #06-2021

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT
REGULAR MEETING - MINUTES
JANUARY 21, 2021

1. CALL TO ORDER

Chairman Rockoff called the Regular Meeting of January 21, 2021 to order at 7:04 PM and explained the various methods of attending the meeting (in person, electronically or telephonically).

2. ADMINISTRATIVE MATTERS

A. ROLL CALL

The following Board Members were in attendance.

Mr. Rockoff
Dr. Rostock (via GotoWebinar)
Mr. Snyder
Mr. Boggie

Staff Members in attendance were Dr. Arrington, Mr. Howard (via GotoWebinar), Ms. Fraraccio, Mr. Pugsley, Mr. Dean, and Mr. Dave (via GotoWebinar).

Consultants in attendance were Mr. Curtis Shenkman and Mr. Hunter Shenkman. Ms. Marshall from Baxter & Woodman, Christine Miranda, P.E. from Holtz Consulting Engineers, Inc., Lisa Wynne from Busch Wildlife Sanctuary all attended via GotoWebinar.

B. PREVIOUS MEETING MINUTES

The minutes of the Regular Meeting of December 17, 2020 were presented for approval and the following motion was made.

MOTION: Made by Mr. Boggie, Seconded by Mr. Snyder,
Passed Unanimously.

"THAT THE GOVERNING BOARD approve the minutes of the December 17, 2020 Regular Meeting as submitted."

C. ADDITIONS & DELETIONS TO THE AGENDA

Item 5K was deleted from Consent Agenda. Item 6H from Regular Agenda was moved to follow after Agenda Item #3

D. ELECTION OF OFFICERS

"THAT THE GOVERNING BOARD elect: Mr. Boggie to serve as Chairman, Mr. Snyder to serve as Vice Chairman, Dr. Rostock to serve as Treasurer, and Mr. Rockoff to serve as Secretary of the Governing Board of the Loxahatchee River Environmental Control District."

MOTION: Made by Mr. Snyder, Seconded by Mr. Rostock,
Passed Unanimously.

3. COMMENTS FROM THE PUBLIC

No comments were received.

6. H. Final Audit Report

"THAT THE GOVERNING BOARD receive the Annual Financial Report for the fiscal years ended September 30, 2020 and 2019 as prepared and submitted by Nowlen, Holt & Miner, P.A."

MOTION: Made by Mr. Rockoff, Seconded by Mr. Rostock,
Passed unanimously.

4. STATUS UPDATES

A. LOXAHATCHEE WATERSHED STATUS

The Restoration Plan for the Northwest Fork of the Loxahatchee River water quality data was featured with some of the highlights from this analysis and reporting.

B. LOXAHATCHEE RIVER DISTRICT DASHBOARD

Dr. Arrington reviewed the District Dashboard.

5. CONSENT AGENDA

MOTION: Made by Mr. Snyder, Seconded by Mr. Rockoff,
Passed unanimously.

"THAT THE GOVERNING BOARD approve the Consent Agenda of January 21, 2021 as presented with the deleting of Item 5K ."

The following motions were approved as a result of the Board's adoption of the Consent Agenda:

A. Authorization to Execute Reports

"THAT THE GOVERNING BOARD approve Resolution 2021-01 authorizing specific signatures for execution of all reports required under the Florida Statutes."

B. Island Country Estates Final Assessment

"THAT THE DISTRICT GOVERNING BOARD approves Resolution 2021-02 adopting the ISLAND COUNTRY ESTATES Assessment Roll and Exhibits."

C. Whispering Trails AMENDED Final Assessment Roll

"THAT THE DISTRICT GOVERNING BOARD approves Resolution No. 2021-03 amending the final assessment roll for Whispering Trails revising the interest rate to 5.25% per annum, effective October 1, 2020.

D. New Palm Beach Heights AMENDED Final Assessment Roll

"THAT THE DISTRICT GOVERNING approves Resolution No. 2021-04 amending the final assessment roll for New Palm Beach Heights revising the interest rate to 5.25% per annum, effective October 1, 2020.

E. Imperial Woods AMENDED Final Assessment Roll

"THAT THE DISTRICT GOVERNING BOARD approves Resolution No. 2021-05 amending the final assessment roll for Imperial Woods revising the interest rate to 5.25% per annum, effective October 1, 2020.

F. US Highway 1 Residential AMENDED Final Assessment Roll

"THAT THE DISTRICT GOVERNING BOARD approves Resolution No. 2021-06 amending the final assessment roll for US Highway 1 Residential revising the interest rate to 5.25% per annum, effective October 1, 2020.

G. 605+607 Military Trail Notice of Intent

"THAT THE DISTRICT GOVERNING BOARD approve Resolution 2021-07, the NOTICE OF INTENT to Assess, the Pending Lien Notice, and the Exhibits for the 605-607 Military Trail Assessment Area.

H. Employee Retirement Plan Trustee Designation

"THAT THE GOVERNING BOARD elects Dr. Matt Rostock to serve as Trustee for the Loxahatchee River Environmental Control District Money Purchase Plan and Trust."

I. Clarifier No. 1 – Effluent Box Repairs - to approve purchase order

"THAT THE GOVERNING BOARD authorize the Executive Director to execute a purchase order to CROM Coatings and Restoration, LLC for the labor, equipment and materials required for the Clarifier No. 1 – Effluent Box Repairs in the amount of $57,889.20."

J. Fixed Asset Disposal – to approve disposal

"THAT THE GOVERNING BOARD authorize the Executive Director to dispose of tangible personal property including asset tag numbers 1931 and 1933 in the schedule above."

L. Rolling Hills Gravity Sewer System – to award engineering services contract

"THAT THE DISTRICT GOVERNING BOARD authorize the Executive Director to execute a work authorization under Holtz Consulting Engineers, Inc. Continuing Services Contract for Rolling Hills Gravity Sewer System, Lift Station and Force Main in the amount of $143,372.00"

M. Change Orders to Current Contracts – to approve modifications

No change orders were presented.

6. REGULAR AGENDA

A. CONSENT AGENDA ITEMS PULLED FOR DISCUSSION

B. Governing Board Appointments and Liaisons

"THAT THE DISTRICT GOVERNING BOARD adopt the chart of
Governing Board appointments and liaisons for the 2021 calendar year and Governing Board member Mr. Rockoff will liaise with the Town of Jupiter ."

MOTION: Made by Mr. Rockoff, Seconded by Mr. Snyder,
Passed unanimously.

C. Lift Station Rehabilitation Contract Extension

"THAT THE DISTRICT GOVERNING BOARD authorize the first of three 12 month extensions to ITB 18-005-LSGENCONSTR and authorize a unit price adjustment of 1.2% and an amount not to exceed $250,000."

MOTION: Made by Mr. Rockoff, Seconded by Mr. Rostock,
Passed unanimously.

D. Lift Station 82 Rehabilitation

"THAT THE DISTRICT GOVERNING BOARD award the Lift Station 082 Conversion construction contract to Hinterland Group, Inc. in the amount of $865,640.00 and a contingency in the amount of $86,564.00."

MOTION: Made by Mr. Rockoff, Seconded by Mr. Rostock,
Passed unanimously.

E. Olympus Drive Force Main & Low-Pressure Sewer Replacement

"THAT THE DISTRICT GOVERNING BOARD award the Bid 20-006-OLYMPUSFMLP construction contract to Foster Marine Contractors, Inc. in the amount of $483,200.00 and a contingency in the amount of $48,320.00."

MOTION: Made by Mr. Rockoff, Seconded by Mr. Snyder,
Passed unanimously.

F. 181st Street Gravity Sewers

"THAT THE DISTRICT GOVERNING BOARD authorize award of Bid 21-105-00104 to Hinterland Group, Inc. for an amount not to exceed $208,000.00 and a contingency amount of $20,800.00"

MOTION: Made by Mr. Rockoff, Seconded by Mr. Rostock,
Passed unanimously.

G. Extension of the District's Emergency Paid Sick Leave (EPSL) through March 31, 2020.

"THAT THE DISTRICT GOVERNING BOARD ratifies the attached, updated version of the Families First Coronavirus Response Act Policy and delegates authority to the Executive Director to revise and implement revisions to this policy to maintain compliance with Federal and State law."

MOTION: Made by Mr. Snyder, Seconded by Mr. Rockoff,
Passed unanimously.

REPORTS

The following reports stood as written.

A. NEIGHBORHOOD SEWERING

B. LEGAL COUNSEL'S REPORT

C. ENGINEER'S REPORTS

D. BUSCH WILDLIFE SANCTUARY

E. DIRECTOR'S REPORT

8. FUTURE BUSINESS

Dr. Arrington reviewed the Future Business report.

9. COMMENTS FROM THE BOARD

10. ADJOURNMENT

MOTION: Made by Mr. Rockoff, Seconded by Dr. Rostock,

Passed Unanimously.

"That the regular meeting of January 21, 2021 adjourns at 8:20 PM."

_____ _____

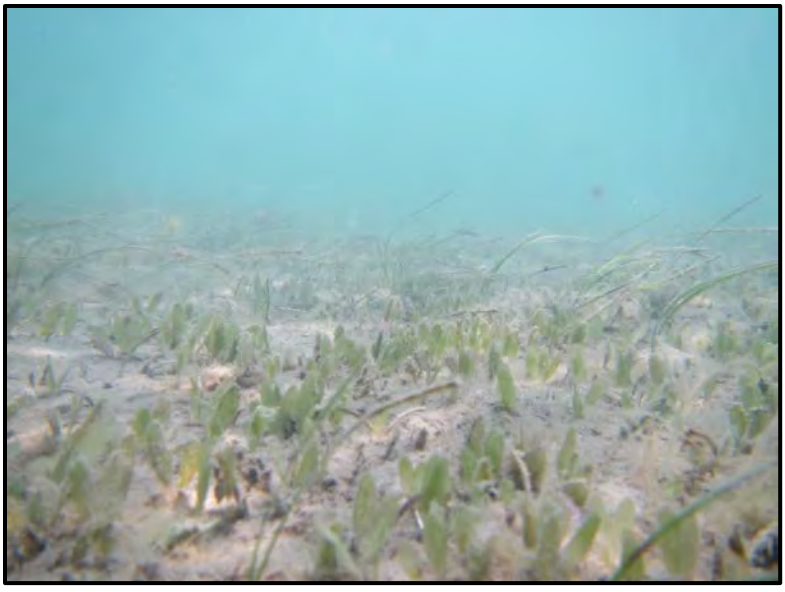
BOARD CHAIRMAN BOARD SECRETARY

_____

RECORDING SECRETARY

Loxahatchee River Watershed Status
Laboratory Study – The effects of Roundup® Herbicide on Seagrass

Over the past two years, Owen Silvera, an FAU Honors College Student and former lab intern, and Dr. Rachel Harris, our Sr. Scientist, and Dr. Arrington, have been working on a laboratory study to assess the effects of the herbicide named Roundup® on two species of seagrasses found in the Loxahatchee River. Besides being in the news for health concerns, some within the scientific community have wondered about the potential affects of Roundup on seagrass. This study provided some interesting, and unanticipated, results that we will share with you at our meeting.



LOXAHATCHEE RIVER DISTRICT'S EXECUTIVE DASHBOARD

		Stewardship	Wastewater						Engineering	General Business					EHS	River Health		
		# People educated at RC	Mean Daily Incoming Flow	Delivery of Reclaimed Water	Customer Service	Sewage Spilled	Permit exceedance	NANO Blend to Reuse (@ 511)	Grease Interceptor Inspections	Cash Available	Revenue (excluding assessment & capital contrib.)	Operating Expenses	Capital Projects		Employee Safety	Minimum Flow Compliance	Salinity @ NB seagrass beds	River Water Quality
Units		% of Target	million gallons/day	# days demand not met	# blockages with damage in home	Gallons; # impacting surface waters	# occurrences	Max Specific Conductance (umhos/cm)	% requiring pump out	$	% of Budget	% of Budget	% within budget	average # days ahead (behind) schedule	# of OSHA recordable injuries	# Days MFL Violation	‰	Fecal Coliform Bacteria (cfu/100ml)
Green Level		≥ 90%	< 7.7	<2	Zero	<704; 0	Zero	<1542	≤ 15	≥ $9,894,657	≥ 95%	≥ 85% but ≤ 105%	≥80%	≥ (30)	Zero	0	min ≥ 20 ‰	≤ 1 site > 200
Yellow		< 90%	< 8.8	≥ 2	1	≤1,500; 0	1	≤1875	≤ 25	< $9,894,657	≥ 90%	≥ 80%	≥60%	≥ (60)	-	1	min ≥ 10 ‰	≤ 3 sites >200
Red		<75%	≥ 8.8	≥ 9	≥ 2	>1,500; ≥1	≥ 2	>1875	> 25	< $5,557,057	< 90%	< 80% or > 105%	< 60%	> (60)	≥ 1	≥ 2	min < 10 ‰	≥ 4 sites > 200
2018 Baseline		112%	6.8	1	0	1,606	0	1,216	8	$ 33,683,858	99%	85%	95%		0.4	42	23.1	1 > 200
2019 Baseline		100%	6.8	1	1	8,022	0	1,229	9	$ 35,137,006	100%	89%	95%		0.3	2	22.9	1 > 200
2020 Baseline		34%	7.2	1	0	3,292	0	1,183	8	$ 35,350,661	100%	90%	91%	-15	0.3	7	14.6	2 > 200
2020	Jan	109%	7.1	6	0	485	0	1,176	7	$ 34,262,489	104%	93%	92%		0	0	7.3	0 > 200
	Feb	137%	7.4	3	1	447	0	1,227	0	$ 35,411,980	102%	91%	92%		1	0	24.5	1 > 200
	Mar	40%	7.3	0	0	10,010	0	1,256	2	$ 34,352,969	104%	90%	92%		0	23	27.9	3 > 200
	Apr	0%	6.9	0	0	121	0	1,331	13	$ 35,108,854	103%	89%	88%		1	30	32.7	1 > 200
	May	0%	7.3	0	0	4,028	0	1,461	0	$ 35,110,453	102%	89%	90%		0	31	11.2	2 > 200
	June	0%	8.0	0	0	17,027; 1	0	986	not avail	$ 34,561,002	101%	88%	90%		0	1	2.0	0 > 200
	July	0%	6.2	0	0	510; 0	1	1,169	not avail	$ 34,611,807	100%	90%	85%		0	0	17.3	2 > 200
	Aug	0%	6.8	1	0	1,465; 0	0	1,168	2	$ 35,735,564	100%	88%	85%		1	0	13.0	4 > 200
	Sept	8%	6.9	0	0	50; 0	0	1,221	4	$ 35,344,038	100%	86%	75%		0	0	14.0	5 > 200
	Oct	18%	7.7	0	0	4,610; 0	0	1,156	11	$ 35,398,326	93%	94%	100%	(12)	0	0	4.1	2 > 200
	Nov	48%	7.6	0	0	603; 0	0	991	27	$ 37,051,051	94%	87%	100%	(15)	0	0	2.5	2 > 200
	Dec	44%	7.3	0	0	152; 0	0	1,051	14	$ 37,259,395	102%	92%	100%	(19)	0	0	18.3	5 > 200
2021	Jan	55%	7.4	0	1*	642; 0	0	1,134	27	$ 37,037,535	100%	88%	100%	(22)	0	0	21.7	0 > 200
Consecutive Months at Green		0	140	11	0	3	6	124	0	138	2	23	61	4	5	7	1	1
Metric Owner		O'Neill	Pugsley	Dean	Dean	Dean	Pugsley	Pugsley	Dean	Fraraccio	Fraraccio	Fraraccio	Dean	Dean	Bains	Howard	Howard	Howard

Metric	Explanation
Public Education	The COVID-19 pandemic caused closure of the River Center in mid-March. The River Center continues to methodically expand program offerings in a COVID-responsible manner, and participation continues to grow, though well below our old target levels (see River Center report for links).
Customer Service	We received a compliant that a gravity sewer blockage resulted in damage inside a business. We are investigating the matter to determine the root cause of the damage (i.e., if the damage was caused by a blockage within LRD's assets).
Grease Interceptors	This month we processed a large number of grease interceptor inspections including many that were backlogged from prior months. The higher than normal percentage requiring pump out appear due to processing the backlogged interceptors.

LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: Governing Board
FROM: Administration Staff
DATE: February 8, 2021
SUBJECT: Consent Agenda

All items listed below are considered routine and will be enacted by one motion. There will be no separate discussion of these items unless requested by a Board Member or citizen, in which event, the item will be removed and considered under the regular agenda.

This month's consent agenda consists of the following items:

A. Operational Greenhouse Gas Emissions and Cost Assessment – to award engineering services contract
B. LS163 Emergency Generator – to award construction contract
C. IQ511 Pump Station Piping Modifications – to award construction contract
D. Master Lift Station Bypass Study – to award engineering study contract
E. Replacement Portable Generator – to approve purchase
F. Public Participation at LRECD Public Meeting Policy – to approve policy
G. Fixed Asset Disposal – to approve disposal
H. Change Orders to Current Contracts – to approve modifications

Should you have any questions regarding these items, I would be pleased to discuss them further with you.

The following Motion is provided for Board consideration:

"THAT THE GOVERNING BOARD approve the Consent Agenda of February 18, 2021 as presented."

Signed,

D. Albrey Arrington, Ph.D.
Executive Director

2500 Jupiter Park Drive
Jupiter, Florida 33458

TEL: (561) 747-5700

FAX: (561) 747-9929

loxahatcheeriver.org

LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: D. Albrey Arrington, Ph.D., Executive Director

FROM: Kris Dean, P.E.,Deputy Executive Director/ Director of Engineering Services

DATE: February 11, 2021

SUBJECT: Greenhouse Gas Emissions Study/N21007: Engineering Services Contract

From the EPA's Report on the Environment, "Greenhouse gases, such as carbon dioxide, methane, nitrous oxide, and certain synthetic chemicals, trap some of the Earth's outgoing energy, thus retaining heat in the atmosphere. This heat trapping causes changes in the radiative balance of the Earth—the balance between energy received from the sun and emitted from Earth— that alter climate and weather patterns at global and regional scales".

Recognizing that greenhouse gases are a contributor to climate change we are proposing to engage a study that looks at greenhouse gas emissions specific to our collection system, water reclamation facility, effluent storage and disposal, reuse system and biosolids process. This study will provide process specific emissions and cost data as well as benchmarking to other utilities and allow us to make informed decisions moving forward on potential process and system improvements.

Staff recommend the following motion.

"THAT THE DISTRICT GOVERNING BOARD authorize the Executive Director to enter into the Contract for Professional Engineering Services for the Operational Greenhouse Gas Emissions and Cost Assessment in the amount of $72,255.00."

2500 Jupiter Park Drive
Jupiter, Florida 33458

TEL: (561) 747-5700

FAX: (561) 747-9929

loxahatcheeriver.org

CONTRACT FOR PROFESSIONAL ENGINEERING SERVICES

This Contract ("Contract") for Professional Engineering Services (the "Services") is made and entered into by the Loxahatchee River Environmental Control District, a Special District of the State of Florida ("District") and Holtz Consulting Engineers, Inc., a Florida corporation ("Engineer"), in response to the District's Request for Qualifications 20-001-PROFSERVICES, for "Engineering Services for Greenhouse Gas Emissions Study."

WHEREAS, in accordance with Section 287.055, Florida Statutes ("Consultants' Competitive Negotiation Act" or "CCNA"), the District issued the Request for Qualifications for Professional Services by Professional Engineers, Architects, Landscape Architects, and Planning Firms and solicited statements from qualified professional engineering firms to provide Services; and

WHEREAS, the District has selected Engineer to provide the Services and desires to enter into a contract within the purview of the CCNA; and

WHEREAS, Engineer represents that it has considerable qualifications, expertise and experience in this area as set forth in its response to the District's Request for Qualifications, and wishes to provide the Services to the District in accordance with the terms and conditions set forth herein.

NOW THEREFORE, in consideration of the mutual representations and obligations herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

Section 1. Term

See Exhibit A

Section 2. Representations by Engineer

By executing this Contract, Engineer makes the following express representations to the District:

A. Engineer is professionally qualified to act as an engineer for the District and provide the Services outlined in the Request for Qualifications issued by the District.

B. Engineer shall maintain all necessary licenses, permits, insurance or other authorizations necessary to act as an engineer for the District until Engineer's duties expressed herein have been fully satisfied.

C. Services performed by Engineer pursuant to this Contract shall comply with all applicable laws, codes and regulations and shall be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing within the same locality.

Section 3. Scope of Services

See Exhibit A

Section 4. Insurance

A. During the performance of Services under this Contract, Engineer shall secure and maintain, at its own expense, the following insurance policies:

(1) Professional liability insurance in an amount not less than one million dollars ($1,000,000.00) per occurrence or claim.

(2) Workers' Compensation and employer's liability insurance for all employees engaged in work pursuant to this Contract in accordance with Florida law.

(3) Comprehensive general liability insurance with bodily injury limits of not less than one million dollars ($1,000,000.00), combined single limit, per occurrence and with property damage limits of not less than one million dollars ($1,000,000.00) combined single limit, per occurrence.

(4) Comprehensive automobile liability insurance for all owned, non-owned and hired automobiles and other vehicles used by Engineer with minimum limits of one million dollars ($1,000,000.00) per person and three hundred thousand dollars ($300,000.00) per accident for Bodily Injury Liability and a minimum of three hundred thousand dollars ($300,000.00) for Property Damage Liability, or a single limit of three hundred thousand dollars ($300,000.00).

B. All liability insurance, with the exception of professional liability, shall specifically provide that the District, and anyone else designated by the District, is an additional named insured with respect to the required coverages and the operations of Engineer pursuant to this Contract.

C. All of the policies of insurance required to be purchased and maintained shall contain a provision or endorsement that coverage afforded shall not be canceled, materially changed or renewal refused until at least thirty (30) calendar days after written notice has been given to the District by certified mail/ return receipt requested.

D. All of Engineer's subcontractors and consultants shall be required to include the District and Engineer as additional insureds on their general liability insurance policies.

E. Engineer shall not commence its Services under this Contract until all insurance coverage required by this section has been obtained and certificates evidencing same are filed with the District.

Section 5. Standard of Care

Engineer shall exercise the same degree of care, skill, and diligence in the performance of the Services as is ordinarily provided by a comparable professional under similar circumstances, and Engineer shall, at no additional cost to the District, re-perform Services which fail to satisfy the

foregoing standard of care. Engineer warrants that all Services shall be performed by skilled and competent personnel to the standard of care above.

Section 6. Personnel

A. Engineer shall assign only qualified personnel to perform any of the Services.

B. At the time of execution of this Contract, the parties anticipate that the following named key individuals will perform those functions indicated [All persons listed below shall have been included in the Qualification Statement]:

_Andrea Holtz, PE_____ – Principal-in-Charge
_Christine Miranda, PE___ – Project Manager
_N/A_____ – Architect
_N/A_____ – Project/Design Engineer (Site/Civil)
_N/A_____ – Project/Design Engineer (Mechanical)
_N/A_____ – Project/Design Engineer (Electrical)
_N/A_____ – Project/Design Engineer (Strucural)
_N/A_____ – Survey
Stephanie Ishii, PhD, PE, Hazen – Specialty Subconsultant

C. Should Engineer reassign any functions or duties to new or additional individuals, Engineer shall provide the District with written notice of any such reassignment within ten (10) calendar days. District reserves the right to require Engineer to change any reassigned personnel.

Section 7. Duties and Obligations of the District

The District shall afford Engineer access to any project site as may be reasonably necessary for Engineer to properly perform the Services under this Contract and shall provide Engineer with sufficient guidance and input to perform all Services contemplated by this Contract in a timely manner.

Section 8. Payments

A. The District shall pay Engineer for Services performed pursuant to this Contract and a Work Authorization in accordance with the Fee Schedule attached hereto as Exhibit A and incorporated herein by reference or as otherwise agreed upon in writing by the District and Engineer. Engineer shall not bill the District for calls or communications of a routine basis that relate solely to the status of pending projects or matters.

B. As a condition precedent for any payment due under this paragraph, Engineer shall submit complete and accurate monthly invoices, unless otherwise agreed to in writing by the District, invoices to the District requesting payment for Services rendered and expenses incurred, as follows:

(1) Each invoice shall bear the signature of Engineer, which signature shall constitute Engineer's representation to the District that the Services indicated in the invoice

have been properly and timely performed, that the expenses included in the invoice have been reasonably incurred, and that all obligations of Engineer covered by prior invoices have been paid in full (unless expressly indicated otherwise).

(2) Engineer shall submit a monthly progress report for each project awarded by the District. The progress report shall include, but not be limited to, a statement of the time and contract dollars expended related to the Services under the Contract and a Work Authorization; and any associated construction project under Engineer's supervision. This report will be included in the Governing Board's monthly meeting notebook.

(3) Engineer shall submit detailed time sheets for projects billed on a time and material basis and a written summary of Services completed for projects billed on a lump sum basis.

C. All submittals for payment of per diem and travel expenses by Engineer shall comply with the provision of Section 112.061, Florida Statutes, and all applicable District policies. The District shall not pay, nor shall Engineer incur, any per diem or travel expenses without the District's prior written approval.

D. The District shall make payment to Engineer within 30 days of receipt of a complete and accurate invoice.

Section 9. Indemnification

A. Engineer agrees to protect, indemnify, pay on behalf of, and hold harmless the District, its employees, and representatives from liabilities, damages, losses, claims and costs, including, but not limited to, reasonable attorney's fees and court costs, including appeals, for which the District, its employees, and representatives can or may be held liable to the extent caused by the negligence, recklessness, or intentional wrongful conduct of Engineer and other persons employed or utilized by Engineer in performance of the Contract.

B. Nothing contained in this Contract shall create a contractual relationship with or a cause of action in favor of a third party against either the District or Engineer, nor shall this Contract be construed as a waiver of sovereign immunity beyond the limited waiver provided in section 768.28, Florida Statutes.

C. Upon completion of all Services, obligations, and duties provided for in this Contract or in the event of termination of this Contract for any reason, the terms and conditions of this Article shall survive.

Section 10. Independent Contractor

Engineer undertakes performance of the Services as an independent contractor and shall be wholly responsible for the methods of performance. The District shall have no right to supervise the means and methods used, but the District shall have the right to observe such performance. Engineer shall work closely with the District in performing the Services under this Contract.

Section 11. Project Records

A. All records reasonably related to the performance of the Services by Engineer or Engineer's consultants or subcontractors, which are not in possession of the District, shall be made available to the District or any state, federal or other regulatory authority for inspection and copying upon written request of the District. Such records include, but are not limited to, all plans, specifications, submittals, correspondences, minutes, memoranda, inspection reports, sound recordings, video recordings and computer files. These records include those documents reflecting the time expended and expenses incurred by the personnel of Engineer and its consultants or subcontractors in performing its obligations pursuant to this Contract.

B. Engineer shall maintain and protect such records for no less than seven (7) years after final completion of any project, or for any longer period of time as may be required by applicable or sound engineering practice.

Section 12. Ownership of Instruments

A. All instruments of professional Services including, but not limited to, documents, records, disks, original drawings, plans and specifications and other information created or procured by Engineer for Services performed pursuant to this Contract shall become the property of the District upon completion of the Services or project for which the instrument was utilized and upon payment by the District.

B. Engineer may maintain copies of all such instruments for its records, provided, however, that any material, products or patent paid for by the District pursuant to this Contract shall be the property of the District and shall not be used by Engineer for profit without the prior written consent of the District.

Section 13. Termination of Contract

A. *Engineer's Termination for Default*: Engineer may, on thirty (30) days' written notice to the District, terminate this Contract in the event the District fails to substantially perform its obligations hereunder and fails to cure such default, if curable, within fifteen (15) days after receiving written notice of such default. Upon such termination, the District shall pay Engineer for all Services performed up to and including the date of termination. Engineer shall not, however, be entitled to any damages from such termination including, but not limited to, loss of anticipated profits.

B. *District's Termination for Default:* The District may, on thirty (30) days' written notice to Engineer, terminate this Contract without prejudice to any other remedy it may have, when in the sole discretion of the District, Engineer fails to substantially perform its obligations hereunder and fails to cure such default, if curable, within fifteen (15) days after receiving written notice of such default. Upon such termination, the District may take possession of all materials, products, documents and records necessary to complete pending Work Authorizations in whatever way it deems expedient. If the expense of completing the Work Authorization exceeds any unpaid balance due to Engineer under this Contract at the time of termination, Engineer shall be responsible to pay the District for the difference. If the expense of completing a Work

Authorization is less than the unpaid balance due under the Work Authorization, Engineer shall be paid only for Services executed and expenses incurred in accordance with the terms of this Contract up through the date of termination.

C. *District's Termination without Default*: The District may, on thirty (30) days' written notice to Engineer, without cause and without prejudice to any other right or remedy, elect to terminate this Contract. Upon such termination, the District shall pay Engineer for all Services executed and expenses incurred in accordance with the terms of this Contract up through the date of termination.

Section 14 Uncontrollable Forces

Neither the District nor Engineer shall be considered to be in default of this Contract if delays in or failure of performance shall be due to Uncontrollable Forces, the effect of which, by the exercise of reasonable diligence, the nonperforming party could not avoid. The term "Uncontrollable Forces" shall mean any event which results in the prevention or delay of performance by a party of its obligations under this Contract and which is beyond the reasonable control of the nonperforming party. It includes, but is not limited to, hurricane, windstorm, fire, flood, earthquake, storm, lightning, epidemic, war, riot, civil disturbance, sabotage, and governmental action.

Neither party shall, however, be excused from performance if nonperformance is due to forces which are preventable, removable, or remediable, and which the nonperforming party could have, with the exercise of reasonable diligence, prevented, removed, or remedied with reasonable dispatch. The nonperforming party shall, within a reasonable time of being prevented or delayed from performance by an uncontrollable force, give written notice to the other party describing the circumstances and uncontrollable forces preventing continued performance of the obligations of this Contract.

Section 15. Successors and Assigns

The District and Engineer each binds itself and its partners, successors, executors, administrators, and assigns to the other party of this Contract and to the partners, successors, executors, administrators, and assigns of such other party, in respect to all covenants of this Contract. Neither the District nor Engineer shall assign, sublet, convey or transfer its interest in this Contract without the prior written consent of the other.

Section 16. Governing Law, Venue and Remedies

A. This Contract shall be governed by the laws of the State of Florida. Any and all legal action necessary to enforce this Contract will be held in Palm Beach County.

B. No remedy herein conferred upon any party is intended to be exclusive of any other remedy, and each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. No single or partial exercise by any party of any right, power, or remedy hereunder shall preclude any other or further exercise thereof.

Section 17. Access and Audits

Engineer shall maintain adequate records to justify all charges, expenses, and costs incurred in estimating and performing Services pursuant to this Contract for at least three (3) years after termination or expiration of this Contract. The District shall have access to such books, records, and documents as required in this section for the purpose of inspection or audit during normal business hours, at Engineer's place of business. In no circumstances will Engineer be required to disclose any confidential or proprietary information regarding its products and service costs.

Section 18. Federal and State Taxes

The District is exempt from federal tax and state sales tax and use taxes. Upon request, the District shall provide an exemption certificate to Engineer. Engineer is not exempt from paying sales tax to its suppliers for materials used to fulfill its obligations under this Contract, nor shall Engineer be authorized to use the District's tax exemption number in securing such materials.

Section 19. Enforcement Costs

If any legal action or other proceeding is brought for the enforcement of this Contract, or because of an alleged dispute, breach, default or misrepresentation in connection with any provisions of this Contract, the successful or prevailing party or parties shall be entitled to recover from the non prevailing party or parties reasonable attorney's fees, court costs and all expenses (including taxes) even if not taxable as court awarded costs (including, without limitation, all such fees, costs and expenses incident to appeals), incurred in that action or proceeding, in addition to any other relief to which such party or parties may be entitled.

Section 20. Severability

If any term or provision of this Contract, or the application thereof to any person or circumstances shall, to any extent, be held invalid or unenforceable, the remainder of this Contract, or the application of such terms or provisions, to persons or circumstances other than those as to whom or which it is held invalid or unenforceable, shall not be affected, and every other term and provision of this Contract shall be deemed valid and enforceable to the extent permitted by law.

Section 21. Notice

All notices required in this Contract shall be sent by certified mail, return receipt requested, and if sent to the District shall be mailed to:

Loxahatchee River Environmental Control District
Attn: Kris Dean, P.E., Deputy Executive Director/Director of Engineering Services
2500 Jupiter Park Drive
Jupiter, FL 33458

and if sent to Engineer shall be mailed to:

Holtz Consulting Engineers, Inc.

Attn: Christine Miranda, PE, Principal Engineer
270 S. Central Blvd., Suite 207
Jupiter, FL 33458

The foregoing names and addresses may be changed if such change is provided in writing to the other party.

Section 22. Entirety of Contract

The District and Engineer agree that this Contract sets forth the entire Contract between the parties, and that there are no promises or understandings other than those stated herein. None of the provisions, terms and conditions contained in this Contract may be added to, modified, superseded or otherwise altered, except by written instrument executed by the parties hereto.

Section 23. Terminology and Captions

All pronouns, singular, plural, masculine, feminine or neuter, shall mean and include the person, entity, firm or corporation to which they relate as the context may require. Wherever the context may require, the singular shall mean and include the plural and the plural shall mean and include the singular. The term "Contract" as used herein, as well as the terms "herein", "hereof", "hereunder", "hereinafter" and the like mean this Contract in its entirety and all exhibits, amendments and addenda attached hereto and made a part hereof. The captions and paragraph headings are for reference and convenience only and do not enter into or become a part of the context of this Contract, nor shall such headings affect the meaning or interpretation of this Contract.

Section 24. Waiver

A waiver by either the District or Engineer of any breach of this Contract shall not be binding upon the waiving party unless such waiver is in writing. In the event of a written waiver, such a waiver shall not affect the waiving party's rights with respect to any other or further breach. The making or acceptance of a payment by either party with knowledge of the existence of a default or breach shall not operate or be construed to operate as a waiver of any subsequent default or breach.

Section 25. Preparation

This Contract shall not be construed more strongly against either party regardless of who was more responsible for its preparation. In interpreting any provision of this Contract, no weight shall be given to, nor shall any construction or interpretation be influenced by, the fact that counsel for one of the parties drafted this Contract, each party recognizing that it and its counsel have had any opportunity to review this Contract and have contributed to the final form of same. Engineer agrees that the Contract is a legally binding document.

Section 26. Exhibits and Contract Documents

Each exhibit and each document referenced in this Contract form an essential part of this Contract. These exhibits and documents, even if not physically attached, should be treated as part of this Contract and are incorporated herein by reference.

Section 27. Survivability

Any provision of the Contract which is of a continuing nature or imposes an obligation which extends beyond the term of this Contract shall survive its expiration or earlier termination.

Section 28. Representations and Binding Authority

The persons executing this Contract represent that they have the full power, authority and legal right to execute and deliver this Contract and perform all its obligations under this Contract.

Section 29. Effective Date

The Effective Date of the Contract shall be the date on which it is executed by the last party to execute same.

Section 30. Time is of the Essence

Time is of the essence of this Contract and any Work Authorization. However, if the final date of any period which is set out in any provision of this Contract falls on a Saturday, Sunday or legal holiday under the law of the United States or the State of Florida, in such event, the time of such period shall be extended to the next day which is not a Saturday, Sunday or legal holiday.

[Remainder of page intentionally left blank – signatures on next page]

IN WITNESS WHEREOF, the District and Engineer have made and executed this Contract on the dates hereinafter written.

ENGINEER:

HOLTZ CONSULTING ENGINEERS, INC., a corporation

By: _____

Print Name: Andrea Holtz, PE

Title: President

Date: February 11, 2021

DISTRICT:

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT,
a Special District of the State of Florida

By: _____
D. Albrey Arrington, Ph.D., Executive Director

Attest:

By: _____

Print Name: _____

Date: _____

Approved as to Form and Legal Sufficiency:

By: _____

AGREEMENT BETWEEN
LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT AND
HOLTZ CONSULTING ENGINEERS, INC.
FOR PROFESSIONAL ENGINEERING SERVICES

Operational Greenhouse Gas Emissions and Cost Assessment

WORK AUTHORIZATION: 2020-3

BACKGROUND

This Agreement is for the performance of engineering services by Holtz Consulting Engineers, Inc. (HCE) pursuant to the Continuing Contract for Professional Engineering Services between Loxahatchee River District (District) and HCE dated October 16, 2020, hereafter referred to as the Contract.

This project includes services necessary to conduct a greenhouse gas emissions and cost assessment for operations at the District's Water Reclamation Facility (WRF), and to provide the District with an Excel-based operational greenhouse gas emissions and cost calculator for future investigation of operational changes. The boundary for the operational assessment will be inclusive of the WRF collection system, wastewater treatment facility, treated effluent storage and disposal, reclaimed water distribution, and biosolids pelletization. Additionally, electricity offsets enabled by reclaimed water and biosolid pellet use as replacements for potable water and synthetic fertilizer, respectively, will be quantified using typical values from published literature.

SCOPE OF WORK

The District has requested engineering services from HCE to complete the following objectives:

- Collect historical information and create an associated inventory for current WRF operations,
- Create a library of greenhouse gas emissions factors and unit costs for every line item in the operational inventory,
- Develop an interactive, Excel-based operational greenhouse gas emissions and cost expenditures calculator,
- Quantify operational greenhouse gas emissions and expenditures, and identify hot spots of burden, and
- Identify potential opportunities for operational greenhouse gas emissions and/or cost savings.

EXHIBIT A

Specific tasks include:

- Task 1 – Kickoff meeting and data review
- Task 2 – Operational greenhouse gas/cost framework and interface development
- Task 3 – Operational inventory development
- Task 4 – Emissions factor and unit cost library development
- Task 5 – Greenhouse gas and cost quantification/visualization
- Task 6 – Technical memorandum

TASK 1 – KICKOFF MEETING AND DATA REVIEW

HCE and it's designated subconsultant Hazen will attend a virtual kickoff meeting with District staff and submit a data request to the District for historical information to be included in the inventory for current operations at the WRF. Subconsultant Hazen will review WRF operational information from the past five calendar years to establish the economic and greenhouse gas burden associated with wastewater collection, treatment, reuse, and disposal. Requested historical data includes the items listed below. Additionally, HCE requests that the District provide unit cost information for operational expenditures, as available.

- Historical influent and effluent flow data (i.e., million gallons of influent and effluent flow per day),
- Historical influent flow characteristics (e.g., TN, TP, BOD concentrations),
- Chemical information (e.g., type, strength of received product, strength of dosed product),
- Historical chemical usage with associated units of measure,
- Historical biosolids production in units of wet and dry mass,
- Historical reclaimed water and concentrate flows to each end use,
- Transportation information (mode of delivery, distance per delivery, weight per delivery) for the following:
    - Each chemical used,
    - Trash and grit disposal, and
    - Biosolids transfer to the Solid Waste Authority Biosolids Processing Facility (SWA BPF).
- Historical miles traveled or fuel consumed by maintenance vehicles,
- Historical electricity use, separated by meter within the collection system, treatment plant, and distribution system,
- Historical onsite diesel use,
- Nutrient content of produced fertilizer pellets, and
- Unit cost information for operational input line items (e.g., electricity, diesel for vehicles, diesel for onsite use, chemicals, etc.).

Hazen will organize historical data provided by the District in an Excel spreadsheet. Flow and operational data will be presented on a monthly timestep. Times series plots and summary statistics will also be developed to identify trends over time and typical conditions.

Hazen will also request the Annual Partner Report provided to the District by SWA and monthly benchmarking metric documents from the past five calendar years. The following major operational inputs for the pelletization of biosolids received from the District WRF will be extracted from these documents. If any outstanding data needs are identified after review of the aforementioned documentation, Hazen will prepare an information request to be delivered to SWA BPF staff via email.

- Nutrient content of produced fertilizer pellets,
- Historical wet mass received as pellet feedstock,
- Historical pellet production,
- Historical electricity use,
- Historical chemical use,
- Transportation information for the delivery of produced pellets to end use, including mode of delivery, distance per delivery, and weight per delivery,
- Historical waste production, and
- Disposal information for waste.

TASK 2 – OPERATIONAL GREENHOUSE GAS/COST FRAMEWORK AND INTERFACE DEVELOPMENT

HCE's subconsultant Hazen will develop a greenhouse gas emissions framework for evaluation of baseline operations at the WRF. This framework will include a description of the greenhouse gas emissions accounting approach, the baseline scenario's boundary, and the types of inventory items to be included based on the established boundary. The baseline scenario inventory will include existing infrastructure and conditions.

The framework will state the scope of emissions to be included in this phase of the greenhouse gas evaluation, with definitions provided for each scope and justification of inclusion/exclusion. The framework will also clarify the basis on which greenhouse gas emissions will be communicated, including a monthly aggregate (e.g., pounds of carbon dioxide equivalents emitted per month) and a footprint per unit flow (e.g., pounds of carbon dioxide equivalents emitted by million gallons of wastewater treated).

As part of this task, Hazen will develop the Excel user interface for accessing the Greenhouse Gas and Operational Expenditures Calculator, including the inventory (i.e., organized historical data), emissions factors, unit costs, greenhouse gas calculations, reference materials, and graphics.

TASK 3 – OPERATIONAL INVENTORY DEVELOPMENT

Based on data received in Task 1 and descriptions established in Task 2, a detailed inventory will be developed for the baseline operations scenario. The inventory will include historical inputs required per month and per million gallons of wastewater treated for operations over the past five calendar years. Inventory items will reflect the inputs and outputs of existing WRF operations that impact the greenhouse gas emissions and costs, such as quantities of chemicals used, energy usage, residuals production, and transportation to/from the WRF per unit flow. The assumed characteristics of the unit flow will be described based on historical information (e.g., assumed TN, TP, and BOD concentrations); potential future changes in flow characteristics that may impact operational greenhouse gas emissions and/or costs will be identified.

TASK 4 – EMISSIONS FACTOR AND UNIT COST LIBRARY DEVELOPMENT

A greenhouse gas emissions factor translates a given quantity of an inventory item (e.g., kWh of electricity) to its associated greenhouse gas emission activity. For greenhouse gas emissions assessments, emissions factors are commonly expressed as a mass of carbon dioxide equivalents per unit weight, volume, distance, or duration of a production or activity that contributes to greenhouse gas footprint. Carbon dioxide equivalents are used in greenhouse gas emissions assessments because inventory items may have different greenhouse gas emissions associated with their production, transportation, and/or use (e.g., carbon dioxide, methane, chlorofluorocarbons) and the use of carbon dioxide equivalents allows for greenhouse gas activity to be compared on an equivalent basis. Carbon dioxide equivalent means the mass of carbon dioxide emissions with the same global warming potential as the mass of another greenhouse gas.

As part of Task 4, Scope 1 and 2 emissions factors for all inventory items identified in Task 3 will be defined. Emissions factors will be defined based on a review of regulatory documents, peer reviewed literature, and industry-accepted databases (e.g., Ecoinvent). For Scope 1 emissions that reflect greenhouse gas emissions from biological treatment processes, information will also be exported from the existing District WRF Biowin process model to better quantify site-specific emissions. Scope 1 emission factors reflect direct emissions from sources that are owned or controlled by the District, such as onsite fossil fuel combustion and fleet fuel combustion. Scope 2 emission factors reflect indirect emissions from sources that are owned or controlled by the District (e.g., pounds of carbon dioxide equivalents resulting from the generation of one kWh of electricity purchased by the District). The emission factor for local electricity use will be based on outreach to the District electricity provider, Florida Power & Light, as well as geographically-specific information provided by the US Environmental Protection Agency. Greenhouse gas emissions associated with the transportation of inventory items to and/or from the WRF will also be included as Scope 2 emissions. Additionally, Scope 2 emissions will address greenhouse gas emission offsets resulting from beneficial reuse of materials, such as the greenhouse gas emission benefit of reduced synthetic fertilizer production due to biosolids pellets and reduced potable water use resulting from irrigation quality reclaimed water use.

Scope 3 emissions, which are those from sources not owned or directly controlled by the District but related to District activities, will not be addressed in this task order.

TASK 5 – GREENHOUSE GAS AND COST QUANTIFICATION/VISUALIZATION

The Greenhouse Gas and Operational Expenditures Calculator will be updated to include a step-wise progression through inventory items, emissions factors, and unit cost information, as well as a calculation module that couples inventory quantities with associated emissions factors and unit cost information. The calculation module will result in greenhouse gas footprint and operational expenditure estimates that are specific to individual inventory items, as well as the total greenhouse gas footprint and operational expenditures on a monthly and flow basis. Graphics will be included in the Excel file to visualize cumulative and disaggregated greenhouse gas emissions and operational expenditures for operations over time.

TASK 6 – TECHNICAL MEMORANDUM

The greenhouse gas emissions evaluation approach, evaluated datasets, findings, benchmark comparison with other utilities and standards, implications of results and a high level discussion on potential modifications/improvements to reduce greenhouse gas emissions will be documented in an electronically delivered draft Technical Memorandum. The draft Greenhouse Gas and Operational Expenditures Calculator will be provided as an electronic Excel file and will be referenced as an attachment in the Technical Memorandum. The draft Technical Memorandum and Calculator will be submitted to the District for review. The HCE team will provide virtual training for executive staff on the calculator.

The HCE team will attend a virtual meeting with District staff to discuss draft deliverables and receive feedback to be included in final deliverables.

Once the comments on the draft document have been received, the final Technical Memorandum will be updated to include the District's comments and submitted to the District.

DELIVERABLES

TASK	DELIVERABLE	QUANTITY
Task 1 – Kickoff meeting and data review	Draft kickoff meeting minutes Final kickoff meeting minutes	Electronic delivery – Word document Electronic delivery – PDF
Task 2 – Greenhouse gas framework and interface development	N/A Resulting information will be included in the Operational Greenhouse Gas and Expenditures Calculator	
Task 3 – Inventory development		
Task 4 – Emissions factor and unit cost library development		

Task 5 – Greenhouse gas and cost quantification/visualization		
Task 6 – Technical memorandum	Draft memorandum Final memorandum Draft calculator Final calculator Draft review meeting minutes Final review meeting minutes	Electronic delivery – Word document Electronic delivery – PDF Electronic delivery – Excel spreadsheet Electronic delivery – Excel spreadsheet Electronic delivery – Word document Electronic delivery – PDF

TIME OF COMPLETION

HCE shall complete the project as outlined below in the project schedule.

- Task 1 – Kickoff meeting and data review
  - 30 days from Notice to Proceed (NTP)
- Task 2 – Greenhouse gas framework and interface development
  - 3 months from receipt of requested information from District and SWA BPF
- Task 3 – Inventory development
  - 3 months from receipt of requested information from District and SWA BPF
- Task 4 – Emissions factor and unit cost library
  - 3 months from receipt of requested information from District and SWA BPF
- Task 5 – Greenhouse gas and cost quantification/valuation
  - 5 months from receipt of requested information from District and SWA BPF
- Task 6 – Technical memorandum
  - Draft technical memorandum to be completed and submitted to the District for review 1 month from completion of Task 5
  - Final technical memorandum to be completed and submitted to the District 2 weeks after receipt of comments from the District

SCHEDULE OF FEES

Proposed labor costs for engineering services are tabulated below.

TASK	**ENGINEERING FEE**
Task 1 – Kickoff meeting and data review	$9,795
Task 2 – Greenhouse gas framework and interface development	$13,875
Task 3 – Inventory development	$12,930
Task 4 – Emissions factor and unit cost library development	$5,685
Task 5 – Greenhouse gas and cost quantification/visualization	$10,620
Task 6 – Technical memorandum	$19,350
TOTAL AMOUNT (LS)	**$72,255**

ASSUMPTIONS

1. District will provide the operational data and cost information requested in Task 1.
2. District will provide contact information for the SWA BFP if needed after review of Annual Partner Reports and monthly benchmarking metric documents.
3. District will review and provide comments on draft technical memorandum within a 2 week time period.

This Authorization is accepted, subject to the terms, conditions, and obligations of the aforementioned Contract.

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT

By: _____ _____
D. Albrey Arrington Ph.D., Executive Director Date

HOLTZ CONSULTING ENGINEERS, INC.

By: _____ 2-1-21
Andrea Holtz HCE, PE, President Date

LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: D. Albrey Arrington, Ph.D., Executive Director

FROM: Kris Dean, P.E., Deputy Executive Director/Director of Engineering Services

DATE: February 12, 2021

SUBJECT: Lift Station 163 Emergency Generator/N20042: Construction Contract

This project provides for an emergency generator and automatic transfer switch at Lift Station 163, a significant repump station serving the Islands of Jupiter, portions of the Shores and surrounding areas.

Holtz Consulting Engineer's recommendation of award and bid details are attached, recommending award to Hinterland Group, Inc.

Staff recommend the following motion:

"THAT THE DISTRICT GOVERNING BOARD award the Lift Station 163 Emergency Generator contract to Hinterland Group, Inc. in the amount of $67,600.00 and a contingency in the amount of $6,700.00".

2500 Jupiter Park Drive
Jupiter, Florida 33458

TEL: (561) 747-5700

FAX: (561) 747-9929

loxahatcheeriver.org

HOLTZ CONSULTING ENGINEERS, INC

February 2, 2021

Mr. Kris Dean, PE
Deputy Executive Director/Director of Engineering Services
Loxahatchee River Environmental Control District
2500 Jupiter Park Drive
Jupiter, FL 33458

Subject: Lift Station #163 Emergency Generator Project
Recommendation of Award to Hinterland Group, Inc.

Dear Mr. Dean,

On January 28, 2021 at 2:00 p.m. bids were opened for the referenced project. There were (3) three bids accepted for the project as follows:

Bidder	Total Bid Amount	Acknowledged Addenda?	Included Original Bid Security?	Attended Pre-Bid Meeting?
Hinterland Group, Inc.	$67,600.00	Y	Y	Y
Brower Lighting & Electrical*	$73,500.00	N	N	N
Florida Design Drilling Corporation	$127,000.00	N	Y	N

*Bid was incomplete and considered non-responsive.

The bids were reviewed by Holtz Consulting Engineers, Inc. (HCE) to evaluate whether the bids were responsive to the bid submittal requirements. The apparent low bidder was Hinterland Group, Inc. with a Total Bid Amount of $67,600.00. Their bid was reviewed and included the required bid bond in the amount of ten percent of their bid from an acceptable surety company according to the US Department of Treasury. They acknowledged receipt of the addenda in the bid form. The other forms and information required to be submitted with their bid appear to be in order. They also attended the pre-bid meeting. We therefore consider the bid submitted by Hinterland Group Inc. to be responsive.

Hinterland Group, Inc. has successfully completed multiple generator and electrical installation projects in South Florida, including some projects for which HCE has served as the engineer of record. Hinterland Group, Inc. will self-perform all of the work for this project, including electrical and civil elements. Hinterland Group, Inc. is a corporation in good standing with the Florida Department of State Division of Corporations. We therefore consider Hinterland Group, Inc. to be a responsible bidder.

Based on the above information, Holtz Consulting Engineers, Inc. considers Hinterland Group Inc. to be the low responsive and responsible bidder and recommends that they be awarded the contract for the Lift Station #163 Emergency Generator project in the Total Bid Amount of $67,600.00.

Sincerely,
HOLTZ CONSULTING ENGINEERS, INC.

Christine Miranda, PE
Principal Engineer

LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: D. Albrey Arrington, Ph.D., Executive Director

FROM: Kris Dean, P.E., Deputy Executive Director/Director of Engineering Services

DATE: February 12, 2021

SUBJECT: IQ 511 Pump Station Piping Improvements/N20036: Construction Contract

With the expiration of our agreement with Seacoast staff identified an opportunity to maximize IQ water resources during drought conditions by bypassing the onsite lake system.

This construction project provides piping, wetwell and control modifications necessary to bypass the onsite lake system.

Baxter & Woodman Consulting Engineer's recommendation of award and bid details are attached, recommending award to Hinterland Group, Inc.

Staff recommend the following motion:

"THAT THE DISTRICT GOVERNING BOARD award the IQ511 Pump Station Piping Improvements contract to Hinterland Group, Inc. in the amount of $515,850.00 and a contingency in the amount of $51,585.00."

2500 Jupiter Park Drive
Jupiter, Florida 33458

TEL: (561) 747-5700

FAX: (561) 747-9929

loxahatcheeriver.org

BAXTER & WOODMAN
Consulting Engineers

February 4, 2021

Mr. Kris Dean
Deputy Executive Director/Director of Engineering
Loxahatchee River District
2500 Jupiter Park Drive
Jupiter, FL 33458

Subject: **Loxahatchee River Environmental Control District**
Irrigation Quality 511 (IQ511) Pump Station Piping Improvements
Bid Review Letter (Bid #21-004-00103)

Dear Mr. Dean:

On Thursday, January 21, 2021 at 2:00 P.M., bids were opened by the Loxahatchee River District for the IQ511 Pump Station Piping Improvements project. Seven (7) bids were received as follows:

	Name of Bidder	**Total Base Bid Price**
1.	Hinterland Group, Inc.	$515,850.00
2.	DBF Construction	$563,621.00
3.	Boromei Construction, Inc.	$567,450.00
4.	Foster Marine Contractors	$596,982.50
5.	Felix Associates of Florida	$599,450.00
6.	TLC Diversified	$628,600.00
7.	Intercounty Engineering	$643,725.00, as read *$643,724.25, as-corrected*

We have reviewed the bid proposals submitted by each of the Contractors and found a small mathematical error with Intercounty Engineering's bid, as noted above, but this error does not affect the ranking order. All other bids submitted were not found to have any mathematical errors. The Bid Tabulation Sheet is attached.

The following summarizes our findings for the low bidder:

Hinterland Group, Inc.

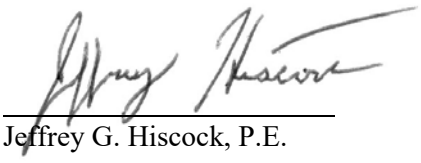
- Acknowledged Addendum No. 1
- Provided Bid Bond (10%).
- Schedule of Bid Prices was filled out correctly.
- Company Financial information was provided and is acceptable.
- Provided Questionnaire.
- Company Headquarters is based in Riviera Beach, Florida.
- Contractor maintains an active Certified General Contract License with the State of Florida.

Baxter & Woodman, has contacted references for Hinterland Group, Inc. and has received satisfactory feedback. It is our opinion that Hinterland Group, Inc. should be able to complete a project of this type and size. They also have the required equipment and manpower available to complete the project. Hinterland Group, Inc. is the lowest responsive bidder with a base bid of $515,850.00.

If you have any questions regarding the information presented, please contact me at 561-425-7760.

Sincerely,

BAXTER & WOODMAN, INC.
CONSULTING ENGINEERS



Jeffrey G. Hiscock, P.E.
Stormwater Engineering Department Manager

cc: B&W File #200453.40

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT
IQ511 PUMP STATION PIPING IMPROVEMENTS PROJECT

BID DATE 1/21/21 @ 2:00 P.M.

BID TABULATION SHEET

				Hinterland Group		DBF Construction	
Item #	**Description**	**Est. Qty.**	**Units**	**Price Bid**	**Total**	**Price Bid**	**Total**
1	Mobilization, Insurance and Bonds (8%)	1	LS	$25,000.00	$25,000.00	$52,500.00	$52,500.00
2	As-Built Record Drawings	1	LS	$7,500.00	$7,500.00	$10,000.00	$10,000.00
3	Professional Audio/Video of Construction Site	1	LS	$2,500.00	$2,500.00	$1,500.00	$1,500.00
4	NPDES Permit/Erosion Protection Measures	1	LS	$2,500.00	$2,500.00	$12,500.00	$12,500.00
	CIVIL						$0.00
5	Excavation (Bypass Influent Bay excavation and backfill)	1	LS	$35,000.00	$35,000.00	$11,000.00	$11,000.00
6	36" DIP Reclaimed Water Main Pipe, Epoxy-Lined	75	LF	$1,250.00	$93,750.00	$703.00	$52,725.00
7	Connection to Existing Reclaimed Water Main (36" Tee)	1	EA	$10,000.00	$10,000.00	$12,050.00	$12,050.00
8	DIP Compact Fittings (epoxy lined)	1	TONS	$7,500.00	$7,500.00	$13,595.00	$13,595.00
9	Asphalt Driveway Restoration	250	SF	$50.00	$12,500.00	$21.00	$5,250.00
10	Furnish & Install Bahia Sod	75	SY	$8.00	$600.00	$17.00	$1,275.00
11	Dewatering	1	LS	$15,000.00	$15,000.00	$25,000.00	$25,000.00
	MECHANICAL						$0.00
12	36" Plug Valve, MJ w/Valve Box	1	EA	$52,000.00	$52,000.00	$59,390.00	$59,390.00
13	36" Aluminum Sluice Gate and Stem Cover	1	EA	$15,000.00	$15,000.00	$25,500.00	$25,500.00
14	Sluice Gate Electric Actuator and Pedestal	1	EA	$12,000.00	$12,000.00	$66,976.00	$66,976.00
15	4' x 3' Aluminum Access Hatch	1	EA	$7,500.00	$7,500.00	$10,500.00	$10,500.00
	STRUCTURAL						$0.00
16	Bypass Influent Bay	1	LS	$60,000.00	$60,000.00	$28,785.00	$28,785.00
17	Sawcut Existing Wet Well Wall	1	LS	$7,500.00	$7,500.00	$5,500.00	$5,500.00
	ELECTRICAL						$0.00
18	Electrical Service to Sluice Gate	1	LS	$48,000.00	$48,000.00	$42,575.00	$42,575.00
19	Electrical Controls and Instrumentation	1	LS	$78,000.00	$78,000.00	$77,500.00	$77,500.00
20	Lighting including Concrete Poles and Fixtures	1	LS	$24,000.00	$24,000.00	$49,500.00	$49,500.00
	TOTAL BASE BID PRICE				**$515,850.00**		**$563,621.00**
	As-Read						

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT
IQ511 PUMP STATION PIPING IMPROVEMENTS PROJECT

BID DATE 1/21/21 @ 2:00 P.M.

BID TABULATION SHEET

				Boromei Construction		Foster Marine Contractors	
Item #	**Description**	**Est. Qty.**	**Units**	**Price Bid**	**Total**	**Price Bid**	**Total**
1	Mobilization, Insurance and Bonds (8%)	1	LS	$45,000.00	$45,000.00	$44,800.00	$44,800.00
2	As-Built Record Drawings	1	LS	$10,000.00	$10,000.00	$4,800.00	$4,800.00
3	Professional Audio/Video of Construction Site	1	LS	$2,000.00	$2,000.00	$1,800.00	$1,800.00
4	NPDES Permit/Erosion Protection Measures	1	LS	$5,000.00	$5,000.00	$5,900.00	$5,900.00
	CIVIL						
5	Excavation (Bypass Influent Bay excavation and backfill)	1	LS	$40,000.00	$40,000.00	$42,350.00	$42,350.00
6	36" DIP Reclaimed Water Main Pipe, Epoxy-Lined	75	LF	$600.00	$45,000.00	$619.00	$46,425.00
7	Connection to Existing Reclaimed Water Main (36" Tee)	1	EA	$6,500.00	$6,500.00	$8,727.00	$8,727.00
8	DIP Compact Fittings (epoxy lined)	1	TONS	$5,000.00	$5,000.00	$20,270.00	$20,270.00
9	Asphalt Driveway Restoration	250	SF	$20.00	$5,000.00	$15.65	$3,912.50
10	Furnish & Install Bahia Sod	75	SY	$6.00	$450.00	$18.00	$1,350.00
11	Dewatering	1	LS	$20,000.00	$20,000.00	$51,693.00	$51,693.00
	MECHANICAL						
12	36" Plug Valve, MJ w/Valve Box	1	EA	$65,000.00	$65,000.00	$47,000.00	$47,000.00
13	36" Aluminum Sluice Gate and Stem Cover	1	EA	$20,000.00	$20,000.00	$15,115.00	$15,115.00
14	Sluice Gate Electric Actuator and Pedestal	1	EA	$3,500.00	$3,500.00	$11,440.00	$11,440.00
15	4' x 3' Aluminum Access Hatch	1	EA	$5,000.00	$5,000.00	$6,300.00	$6,300.00
	STRUCTURAL						$0.00
16	Bypass Influent Bay	1	LS	$55,000.00	$55,000.00	$80,000.00	$80,000.00
17	Sawcut Existing Wet Well Wall	1	LS	$5,000.00	$5,000.00	$7,500.00	$7,500.00
	ELECTRICAL						
18	Electrical Service to Sluice Gate	1	LS	$70,000.00	$70,000.00	$62,000.00	$62,000.00
19	Electrical Controls and Instrumentation	1	LS	$125,000.00	$125,000.00	$119,000.00	$119,000.00
20	Lighting including Concrete Poles and Fixtures	1	LS	$35,000.00	$35,000.00	$16,600.00	$16,600.00
	TOTAL BASE BID PRICE				**$567,450.00**		**$596,982.50**
	As-Read						

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT
IQ511 PUMP STATION PIPING IMPROVEMENTS PROJECT

BID DATE 1/21/21 @ 2:00 P.M.

BID TABULATION SHEET

				Felix Associates of Florida		TLC Diversified	
Item #	**Description**	**Est. Qty.**	**Units**	**Price Bid**	**Total**	**Price Bid**	**Total**
1	Mobilization, Insurance and Bonds (8%)	1	LS	$40,000.00	$40,000.00	$48,000.00	$48,000.00
2	As-Built Record Drawings	1	LS	$9,000.00	$9,000.00	$10,000.00	$10,000.00
3	Professional Audio/Video of Construction Site	1	LS	$1,000.00	$1,000.00	$1,000.00	$1,000.00
4	NPDES Permit/Erosion Protection Measures	1	LS	$5,000.00	$5,000.00	$2,000.00	$2,000.00
	CIVIL						
5	Excavation (Bypass Influent Bay excavation and backfill)	1	LS	$45,000.00	$45,000.00	$119,000.00	$119,000.00
6	36" DIP Reclaimed Water Main Pipe, Epoxy-Lined	75	LF	$670.00	$50,250.00	$810.00	$60,750.00
7	Connection to Existing Reclaimed Water Main (36" Tee)	1	EA	$5,400.00	$5,400.00	$1,300.00	$1,300.00
8	DIP Compact Fittings (epoxy lined)	1	TONS	$10,000.00	$10,000.00	$8,000.00	$8,000.00
9	Asphalt Driveway Restoration	250	SF	$110.00	$27,500.00	$5.00	$1,250.00
10	Furnish & Install Bahia Sod	75	SY	$8.00	$600.00	$44.00	$3,300.00
11	Dewatering	1	LS	$55,000.00	$55,000.00	$18,000.00	$18,000.00
	MECHANICAL						
12	36" Plug Valve, MJ w/Valve Box	1	EA	$39,500.00	$39,500.00	$55,000.00	$55,000.00
13	36" Aluminum Sluice Gate and Stem Cover	1	EA	$19,500.00	$19,500.00	$12,000.00	$12,000.00
14	Sluice Gate Electric Actuator and Pedestal	1	EA	$8,700.00	$8,700.00	$9,000.00	$9,000.00
15	4' x 3' Aluminum Access Hatch	1	EA	$3,250.00	$3,250.00	$2,000.00	$2,000.00
	STRUCTURAL						
16	Bypass Influent Bay	1	LS	$39,000.00	$39,000.00	$62,000.00	$62,000.00
17	Sawcut Existing Wet Well Wall	1	LS	$7,250.00	$7,250.00	$3,000.00	$3,000.00
	ELECTRICAL						
18	Electrical Service to Sluice Gate	1	LS	$80,000.00	$80,000.00	$109,000.00	$109,000.00
19	Electrical Controls and Instrumentation	1	LS	$134,000.00	$134,000.00	$87,000.00	$87,000.00
20	Lighting including Concrete Poles and Fixtures	1	LS	$19,500.00	$19,500.00	$17,000.00	$17,000.00
	TOTAL BASE BID PRICE				**$599,450.00**		**$628,600.00**
	As-Read						

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT
IQ511 PUMP STATION PIPING IMPROVEMENTS PROJECT

BID DATE 1/21/21 @ 2:00 P.M.

BID TABULATION SHEET

				Intercounty Engineering	
Item #	**Description**	**Est. Qty.**	**Units**	**Price Bid**	**Total**
1	Mobilization, Insurance and Bonds (8%)	1	LS	$57,894.00	$57,894.00
2	As-Built Record Drawings	1	LS	$6,120.00	$6,120.00
3	Professional Audio/Video of Construction Site	1	LS	$1,453.00	$1,453.00
4	NPDES Permit/Erosion Protection Measures	1	LS	$3,580.00	$3,580.00
	CIVIL				
5	Excavation (Bypass Influent Bay excavation and backfill)	1	LS	$52,020.00	$52,020.00
6	36" DIP Reclaimed Water Main Pipe, Epoxy-Lined	75	LF	$590.60	$44,295.00
7	Connection to Existing Reclaimed Water Main (36" Tee)	1	EA	$8,067.00	$8,067.00
8	DIP Compact Fittings (epoxy lined)	1	TONS	$21,283.00	$21,283.00
9	Asphalt Driveway Restoration	250	SF	$28.76	$7,190.00
10	Furnish & Install Bahia Sod	75	SY	$10.71	$803.25
11	Dewatering	1	LS	$41,310.00	$41,310.00
	MECHANICAL				
12	36" Plug Valve, MJ w/Valve Box	1	EA	$47,040.00	$47,040.00
13	36" Aluminum Sluice Gate and Stem Cover	1	EA	$17,440.00	$17,440.00
14	Sluice Gate Electric Actuator and Pedestal	1	EA	$2,335.00	$2,335.00
15	4' x 3' Aluminum Access Hatch	1	EA	$6,525.00	$6,525.00
	STRUCTURAL				
16	Bypass Influent Bay	1	LS	$18,360.00	$18,360.00
17	Sawcut Existing Wet Well Wall	1	LS	$10,404.00	$10,404.00
	ELECTRICAL				
18	Electrical Service to Sluice Gate	1	LS	$95,950.00	$95,950.00
19	Electrical Controls and Instrumentation	1	LS	$175,990.00	$175,990.00
20	Lighting including Concrete Poles and Fixtures	1	LS	$25,715.00	$25,715.00
	TOTAL BASE BID PRICE				**$643,774.25**
	As-Read				**$643,775.00**

LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: D. Albrey Arrington, Ph.D., Executive Director

FROM: Kris Dean,P.E.,Deputy Executive Director/ Director of Engineering Services

DATE: February 11, 2021

SUBJECT: Master Lift Station Bypass Study/N21005: Engineering Services Contract

The Master Lift Station is located just east of the corner of Pennock Lane and Indiantown Road. This station is the repump station for the Eastern and Western Tequesta Peninsulas, Jupiter Island, Jupiter Inlet Colony, and roughly everything east of Pennock Lane and north of Indian Creek Parkway on both sides of the ICW, re- pumping an average of 3 million gallons a day.

Obvious from the above, the Master Lift Station is the single most critical District asset outside the plant. The Master Lift Station's functionality along with the upstream 36" gravity trunk main in Indiantown Road and the downstream 30" transmission main to the plant are critical to our operations and without them we have no way of moving the 3 million gallons per day to our plant for treatment.

Attached you will find a work authorization for professional engineering services to determine system improvements that would allow repumped flows for the Master Lift Station, 36" gravity trunk line and 30" force main to be bypassed. Services include project management, data gathering and planning, hydraulic model development, feasibility evaluation, system upgrade identification and capital project identification summarized in a technical memorandum at conclusion.

Staff recommend the following motion.

"THAT THE DISTRICT GOVERNING BOARD authorize the Executive Director to enter into the Contract for Professional Engineering Services for the Master Lift Station Bypass Study in the amount of $206,344."

2500 Jupiter Park Drive
Jupiter, Florida 33458

TEL: (561) 747-5700

FAX: (561) 747-9929

loxahatcheeriver.org

CONTRACT FOR PROFESSIONAL ENGINEERING SERVICES

This Contract ("Contract") for Professional Engineering Services (the "Services") is made and entered into by the Loxahatchee River Environmental Control District, a Special District of the State of Florida ("District") and Carollo Engineers, Inc., a Delaware corporation ("Engineer"), in response to the District's Request for Qualifications for "Engineering Services for Master Lift Station Bypass Study."

WHEREAS, in accordance with Section 287.055, Florida Statutes ("Consultants' Competitive Negotiation Act" or "CCNA"), the District issued the Request for Qualifications for Engineering Services for Master Lift Station Bypass Study and solicited statements from qualified professional engineering firms to provide Services; and

WHEREAS, the District has selected Engineer to provide the Services and desires to enter into a contract within the purview of the CCNA; and

WHEREAS, Engineer represents that it has considerable qualifications, expertise and experience in this area as set forth in its response to the District's Request for Qualifications, and wishes to provide the Services to the District in accordance with the terms and conditions set forth herein.

NOW THEREFORE, in consideration of the mutual representations and obligations herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

Section 1. Term

Seven (7) months, See "Project Schedule" in Exhibit A – Master Lift Station Bypass Study Scope of Work

Section 2. Representations by Engineer

By executing this Contract, Engineer makes the following express representations to the District:

A. Engineer is professionally qualified to act as an engineer for the District and provide the Services outlined in the Request for Qualifications issued by the District.

B. Engineer shall maintain all necessary licenses, permits, insurance or other authorizations necessary to act as an engineer for the District until Engineer's duties expressed herein have been fully satisfied.

C. Services performed by Engineer pursuant to this Contract shall comply with all applicable laws, codes and regulations and shall be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing within the same locality.

Section 3. Scope of Services

Exhibit A – Master Lift Station Bypass Study Scope of Work

Section 4. Insurance

A. During the performance of Services under this Contract, Engineer shall secure and maintain, at its own expense, the following insurance policies:

(1) Professional liability insurance in an amount not less than one million dollars ($1,000,000.00) per occurrence or claim.

(2) Workers' Compensation and employer's liability insurance for all employees engaged in work pursuant to this Contract in accordance with Florida law.

(3) Comprehensive general liability insurance with bodily injury limits of not less than one million dollars ($1,000,000.00), combined single limit, per occurrence and with property damage limits of not less than one million dollars ($1,000,000.00) combined single limit, per occurrence.

(4) Comprehensive automobile liability insurance for all owned, non-owned and hired automobiles and other vehicles used by Engineer with minimum limits of one million dollars ($1,000,000.00) per person and three hundred thousand dollars ($300,000.00) per accident for Bodily Injury Liability and a minimum of three hundred thousand dollars ($300,000.00) for Property Damage Liability, or a single limit of three hundred thousand dollars ($300,000.00).

B. All liability insurance, with the exception of professional liability, shall specifically provide that the District, and anyone else designated by the District, is an additional named insured with respect to the required coverages and the operations of Engineer pursuant to this Contract.

C. All of the policies of insurance required to be purchased and maintained shall contain a provision or endorsement that coverage afforded shall not be canceled, materially changed or renewal refused until at least thirty (30) calendar days after written notice has been given to the District by certified mail/ return receipt requested.

D. All of Engineer's subcontractors and consultants shall be required to include the District and Engineer as additional insureds on their general liability insurance policies.

E. Engineer shall not commence its Services under this Contract until all insurance coverage required by this section has been obtained and certificates evidencing same are filed with the District.

Section 5. Standard of Care

Engineer shall exercise the same degree of care, skill, and diligence in the performance of the Services as is ordinarily provided by a comparable professional under similar circumstances, and Engineer shall, at no additional cost to the District, re-perform Services which fail to satisfy the

foregoing standard of care. Engineer warrants that all Services shall be performed by skilled and competent personnel to the standard of care above.

Section 6. Personnel

A. Engineer shall assign only qualified personnel to perform any of the Services.

B. At the time of execution of this Contract, the parties anticipate that the following named key individuals will perform those functions indicated [All persons listed below shall have been included in the Qualification Statement]:

Elizabeth Fujikawa, PE– Principal-in-Charge
Randy Braley, PE – Project Director
Scott Richards, PE – Project Manager
Lara Baumberger, PE – Modeling Specialist
Angelica Gregory, PE – Hydraulic Modeling
Mark Ludwigson, PE – Project Engineer
Juniper Marini – Staff Engineer

C. Should Engineer reassign any functions or duties to new or additional individuals, Engineer shall provide the District with written notice of any such reassignment within ten (10) calendar days. District reserves the right to require Engineer to change any reassigned personnel.

Section 7. Duties and Obligations of the District

The District shall afford Engineer access to any project site as may be reasonably necessary for Engineer to properly perform the Services under this Contract and shall provide Engineer with sufficient guidance and input to perform all Services contemplated by this Contract in a timely manner.

Section 8. Payments

A. The District shall pay Engineer for Services performed pursuant to this Contract and a Work Authorization in accordance with the Fee Schedule attached hereto in Exhibit A and incorporated herein by reference or as otherwise agreed upon in writing by the District and Engineer. Engineer shall not bill the District for calls or communications of a routine basis that relate solely to the status of pending projects or matters.

B. As a condition precedent for any payment due under this paragraph, Engineer shall submit complete and accurate monthly invoices, unless otherwise agreed to in writing by the District, invoices to the District requesting payment for Services rendered and expenses incurred, as follows:

(1) Each invoice shall bear the signature of Engineer, which signature shall constitute Engineer's representation to the District that the Services indicated in the invoice have been properly and timely performed, that the expenses included in the invoice have been reasonably incurred, and that all obligations of Engineer

covered by prior invoices have been paid in full (unless expressly indicated otherwise).

(2) Engineer shall submit a monthly progress report for each project awarded by the District. The progress report shall include, but not be limited to, a statement of the time and contract dollars expended related to the Services under the Contract and a Work Authorization; and any associated construction project under Engineer's supervision. This report will be included in the Governing Board's monthly meeting notebook.

(3) Engineer shall submit detailed time sheets for projects billed on a time and material basis and a written summary of Services completed for projects billed on a lump sum basis.

C. All submittals for payment of per diem and travel expenses by Engineer shall comply with the provision of Section 112.061, Florida Statutes, and all applicable District policies. The District shall not pay, nor shall Engineer incur, any per diem or travel expenses without the District's prior written approval.

D. The District shall make payment to Engineer within 30 days of receipt of a complete and accurate invoice.

Section 9. Indemnification

A. Engineer agrees to protect, indemnify, pay on behalf of, and hold harmless the District, its employees, and representatives from liabilities, damages, losses, claims and costs, including, but not limited to, reasonable attorney's fees and court costs, including appeals, for which the District, its employees, and representatives can or may be held liable to the extent caused by the negligence, recklessness, or intentional wrongful conduct of Engineer and other persons employed or utilized by Engineer in performance of the Contract.

B. Nothing contained in this Contract shall create a contractual relationship with or a cause of action in favor of a third party against either the District or Engineer, nor shall this Contract be construed as a waiver of sovereign immunity beyond the limited waiver provided in section 768.28, Florida Statutes.

C. Upon completion of all Services, obligations, and duties provided for in this Contract or in the event of termination of this Contract for any reason, the terms and conditions of this Article shall survive.

Section 10. Independent Contractor

Engineer undertakes performance of the Services as an independent contractor and shall be wholly responsible for the methods of performance. The District shall have no right to supervise the means and methods used, but the District shall have the right to observe such performance. Engineer shall work closely with the District in performing the Services under this Contract.

Section 11. Project Records

A. All records reasonably related to the performance of the Services by Engineer or Engineer's consultants or subcontractors, which are not in possession of the District, shall be made available to the District or any state, federal or other regulatory authority for inspection and copying upon written request of the District. Such records include, but are not limited to, all plans, specifications, submittals, correspondences, minutes, memoranda, inspection reports, sound recordings, video recordings and computer files. These records include those documents reflecting the time expended and expenses incurred by the personnel of Engineer and its consultants or subcontractors in performing its obligations pursuant to this Contract.

B. Engineer shall maintain and protect such records for no less than seven (7) years after final completion of any project, or for any longer period of time as may be required by applicable or sound engineering practice.

Section 12. Ownership of Instruments

A. All instruments of professional Services including, but not limited to, documents, records, disks, original drawings, plans and specifications and other information created or procured by Engineer for Services performed pursuant to this Contract shall become the property of the District upon completion of the Services or project for which the instrument was utilized and upon payment by the District.

B. Engineer may maintain copies of all such instruments for its records, provided, however, that any material, products or patent paid for by the District pursuant to this Contract shall be the property of the District and shall not be used by Engineer for profit without the prior written consent of the District.

Section 13. Termination of Contract

A. *Engineer's Termination for Default*: Engineer may, on thirty (30) days' written notice to the District, terminate this Contract in the event the District fails to substantially perform its obligations hereunder and fails to cure such default, if curable, within fifteen (15) days after receiving written notice of such default. Upon such termination, the District shall pay Engineer for all Services performed up to and including the date of termination. Engineer shall not, however, be entitled to any damages from such termination including, but not limited to, loss of anticipated profits.

B. *District's Termination for Default:* The District may, on thirty (30) days' written notice to Engineer, terminate this Contract without prejudice to any other remedy it may have, when Engineer fails to substantially perform its obligations hereunder and fails to cure such default, if curable, within fifteen (15) days after receiving written notice of such default. Upon such termination, the District may take possession of all materials, products, documents and records necessary to complete pending Work Authorizations in whatever way it deems expedient. If the expense of completing the Work Authorization exceeds any unpaid balance due to Engineer under this Contract at the time of termination, Engineer shall be responsible to pay the District for the difference. If the expense of completing a Work Authorization is less than the unpaid balance due under the Work Authorization, Engineer shall be paid only for Services executed

and expenses incurred in accordance with the terms of this Contract up through the date of termination.

C. *District's Termination without Default*: The District may, on thirty (30) days' written notice to Engineer, without cause and without prejudice to any other right or remedy, elect to terminate this Contract. Upon such termination, the District shall pay Engineer for all Services executed and expenses incurred in accordance with the terms of this Contract up through the date of termination.

Section 14 Uncontrollable Forces

Neither the District nor Engineer shall be considered to be in default of this Contract if delays in or failure of performance shall be due to Uncontrollable Forces, the effect of which, by the exercise of reasonable diligence, the nonperforming party could not avoid. The term "Uncontrollable Forces" shall mean any event which results in the prevention or delay of performance by a party of its obligations under this Contract and which is beyond the reasonable control of the nonperforming party. It includes, but is not limited to, hurricane, windstorm, fire, flood, earthquake, storm, lightning, epidemic, war, riot, civil disturbance, sabotage, and governmental action.

Neither party shall, however, be excused from performance if nonperformance is due to forces which are preventable, removable, or remediable, and which the nonperforming party could have, with the exercise of reasonable diligence, prevented, removed, or remedied with reasonable dispatch. The nonperforming party shall, within a reasonable time of being prevented or delayed from performance by an uncontrollable force, give written notice to the other party describing the circumstances and uncontrollable forces preventing continued performance of the obligations of this Contract.

Section 15. Successors and Assigns

The District and Engineer each binds itself and its partners, successors, executors, administrators, and assigns to the other party of this Contract and to the partners, successors, executors, administrators, and assigns of such other party, in respect to all covenants of this Contract. Neither the District nor Engineer shall assign, sublet, convey or transfer its interest in this Contract without the prior written consent of the other.

Section 16. Governing Law, Venue and Remedies

A. This Contract shall be governed by the laws of the State of Florida. Any and all legal action necessary to enforce this Contract will be held in Palm Beach County.

B. No remedy herein conferred upon any party is intended to be exclusive of any other remedy, and each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. No single or partial exercise by any party of any right, power, or remedy hereunder shall preclude any other or further exercise thereof.

Section 17. Access and Audits

Engineer shall maintain adequate records to justify all charges, expenses, and costs incurred in estimating and performing Services pursuant to this Contract for at least three (3) years after termination or expiration of this Contract. The District shall have access to such books, records, and documents as required in this section for the purpose of inspection or audit during normal business hours, at Engineer's place of business. In no circumstances will Engineer be required to disclose any confidential or proprietary information regarding its products and service costs.

Section 18. Federal and State Taxes

The District is exempt from federal tax and state sales tax and use taxes. Upon request, the District shall provide an exemption certificate to Engineer. Engineer is not exempt from paying sales tax to its suppliers for materials used to fulfill its obligations under this Contract, nor shall Engineer be authorized to use the District's tax exemption number in securing such materials.

Section 19. Enforcement Costs

If any legal action or other proceeding is brought for the enforcement of this Contract, or because of an alleged dispute, breach, default or misrepresentation in connection with any provisions of this Contract, the successful or prevailing party or parties shall be entitled to recover from the non prevailing party or parties reasonable attorney's fees, court costs and all expenses (including taxes) even if not taxable as court awarded costs (including, without limitation, all such fees, costs and expenses incident to appeals), incurred in that action or proceeding, in addition to any other relief to which such party or parties may be entitled.

Section 20. Severability

If any term or provision of this Contract, or the application thereof to any person or circumstances shall, to any extent, be held invalid or unenforceable, the remainder of this Contract, or the application of such terms or provisions, to persons or circumstances other than those as to whom or which it is held invalid or unenforceable, shall not be affected, and every other term and provision of this Contract shall be deemed valid and enforceable to the extent permitted by law.

Section 21. Notice

All notices required in this Contract shall be sent by certified mail, return receipt requested, and if sent to the District shall be mailed to:

Loxahatchee River Environmental Control District
Attn: Kris Dean, P.E., Deputy Executive Director/Director of Engineering Services
2500 Jupiter Park Drive
Jupiter, FL 33458

and if sent to Engineer shall be mailed to:

Carollo Engineers, Inc.

Attn: Elizabeth Fujikawa, PE, Vice President
2056 Vista Parkway, Suite 400
West Palm Beach, FL 33411

The foregoing names and addresses may be changed if such change is provided in writing to the other party.

Section 22. Entirety of Contract

The District and Engineer agree that this Contract sets forth the entire Contract between the parties, and that there are no promises or understandings other than those stated herein. None of the provisions, terms and conditions contained in this Contract may be added to, modified, superseded or otherwise altered, except by written instrument executed by the parties hereto.

Section 23. Terminology and Captions

All pronouns, singular, plural, masculine, feminine or neuter, shall mean and include the person, entity, firm or corporation to which they relate as the context may require. Wherever the context may require, the singular shall mean and include the plural and the plural shall mean and include the singular. The term "Contract" as used herein, as well as the terms "herein", "hereof", "hereunder", "hereinafter" and the like mean this Contract in its entirety and all exhibits, amendments and addenda attached hereto and made a part hereof. The captions and paragraph headings are for reference and convenience only and do not enter into or become a part of the context of this Contract, nor shall such headings affect the meaning or interpretation of this Contract.

Section 24. Waiver

A waiver by either the District or Engineer of any breach of this Contract shall not be binding upon the waiving party unless such waiver is in writing. In the event of a written waiver, such a waiver shall not affect the waiving party's rights with respect to any other or further breach. The making or acceptance of a payment by either party with knowledge of the existence of a default or breach shall not operate or be construed to operate as a waiver of any subsequent default or breach.

Section 25. Preparation

This Contract shall not be construed more strongly against either party regardless of who was more responsible for its preparation. In interpreting any provision of this Contract, no weight shall be given to, nor shall any construction or interpretation be influenced by, the fact that counsel for one of the parties drafted this Contract, each party recognizing that it and its counsel have had any opportunity to review this Contract and have contributed to the final form of same. Engineer agrees that the Contract is a legally binding document.

Section 26. Exhibits and Contract Documents

Each exhibit and each document referenced in this Contract form an essential part of this Contract. These exhibits and documents, even if not physically attached, should be treated as part of this Contract and are incorporated herein by reference.

Section 27. Survivability

Any provision of the Contract which is of a continuing nature or imposes an obligation which extends beyond the term of this Contract shall survive its expiration or earlier termination.

Section 28. Representations and Binding Authority

The persons executing this Contract represent that they have the full power, authority and legal right to execute and deliver this Contract and perform all its obligations under this Contract.

Section 29. Effective Date

The Effective Date of the Contract shall be the date on which it is executed by the last party to execute same.

Section 30. Time is of the Essence

Time is of the essence of this Contract and any Work Authorization. However, if the final date of any period which is set out in any provision of this Contract falls on a Saturday, Sunday or legal holiday under the law of the United States or the State of Florida, in such event, the time of such period shall be extended to the next day which is not a Saturday, Sunday or legal holiday.

[Remainder of page intentionally left blank – signatures on next page]

IN WITNESS WHEREOF, the District and Engineer have made and executed this Contract on the dates hereinafter written.

ENGINEER:

Carollo Engineers, Inc., a Delaware corporation

By: Elizabeth Fujikawa

Print Name: ELIZABETH FUJIKAWA, P.E.

Title: VICE PRESIDENT

Date: 2/10/2021

DISTRICT:

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT, a Special District of the State of Florida

By: _____
D. Albrey Arrington, Ph.D., Executive Director

Attest:

By: _____

Print Name: _____

Date: _____

Approved as to Form and Legal Sufficiency:

By: _____

Engineers...Working Wonders With Water®

February 9, 2021

Mr. Kris Dean, P.E.
Deputy Executive Director/Director of Engineering
Loxahatchee River Environmental Control District (District)
2500 Jupiter Park Drive
Jupiter, FL 33458

Subject: Loxahatchee River District – Master Lift Station Bypass Study Scope of Work

Dear Mr. Dean:

We appreciate the opportunity to support the Loxahatchee River Environmental Control District with this proposal for a Master Lift Station Bypass Study.

The District has identified the need for long-term collection system flexibility and redundancy. We understand that such flexibility would be accomplished through the re-routing of approximately 75 percent of the flow that currently is routed to and then pumped by master lift station (MLS) 1, among other projects that are either in the planning or more advanced phases. We also understand that the re-routing of the flow as conceptualized (using/upgrading the Frederick Small and Central Blvd Corridor and the S. Dixie/Glynn Mayo Hwy Corridor from Indiantown South to Frederick Small) has the potential to change system conditions, therefore changing system dynamics.

Our work will include the following:

- Gather data that will allow further knowing your system and assessing strategic planning needs,
- Develop a hydraulic model that can be effectively used to make informed engineering decisions,
- Establish realistic baseline conditions through data-driven model calibration,
- Evaluate feasibility of the District-proposed bypass route (including hydraulic considerations, cost, and implementation implications),
- Identify major required system upgrades due to the change in system dynamics, and
- Propose a bypass implementation schedule.

Our Scope of Work is as follows.

SCOPE OF WORK

Carollo will deliver a MLS Bypass Study to help in the District's strategic plan towards long-term system-wide collections flexibility. To carry on this study, a calibrated hydraulic model of the collections system that is capable of simulating a range of scenarios is necessary. With the use of a model, the system can be evaluated before and after the MLS Bypass, under average and peak flow conditions, and in conjunction with other ongoing projects (such as the parallel subaqueous pipe under the Loxahatchee River along Glynn Mayo Hwy), to determine potential improvements in operations,

whether current issues are remedied and future goals are met, and identify issues that may be generated. To trace a feasible strategic plan, Carollo will preliminarily identify major required system upgrades and propose a bypass implementation schedule.

Prerequisites: To develop a model to generate recommendations that allow informed decision making, Carollo will make use of existing raw GIS sewer databases to: fix pipeline connectivity, add direction of flow, define vertical datum and elevations, define pipeline-lift station-pumps relationships, create attributes for vertical assets such as pumps, pressure junctions, and typically operated valves; and create fields that allow for mapping of interconnected GIS attributes in InfoWorks ICM upon importing the GIS database. Carollo will work with local subconsultant Florida Technical Consultants (FTC) to manipulate the raw GIS database as described and as applicable.

Additional pre-requisites of building an accurate hydraulic model, such as wastewater loads allocation in the existing scenario, and model calibration, are included.

The following tasks and level of effort is based on information included in the RFQ, our discussions with District staff, experience with other similar projects, and our estimate of what is needed to accomplish the project objectives. The MLS Bypass Study will be completed through seven (7) different tasks:

TASK 1 – PROJECT MANAGEMENT AND MEETINGS

Subtask 1.1 - Project Management, Communication, and Quality Control

Carollo will provide overall project management and communication between its staff, the subconsultant, and District staff. Carollo will track and manage the budget, project tasks, and schedule.

Carollo will provide monthly progress summaries that will include itemized listings of work completed and work that will be anticipated in the upcoming month. These summaries will be delivered in the form of a letter that will accompany the monthly progress payment request.

Carollo's project manager will coordinate quality control and quality assurance review of the project including model development, calibration procedures, and final model check after scenario development including both dry and wet weather scenarios; hydraulic analyses and project recommendations, cost estimates, and Technical Memorandum.

Subtask 1.2 - Project Kickoff and Progress Meetings

Carollo will facilitate a Project Kickoff Meeting to review the project tasks, schedule, lines of communication, and quality management procedures. The Kickoff Meeting will be a working meeting to discuss project needs, efficient and effective data collection approaches, and other items necessary to quickly begin the project.

Carollo proposes to conduct six (6) project meetings throughout the project to inform District staff on the project's progress, findings, and recommendations. Three (3) of the meetings shall be virtual. The agenda, meeting materials, meeting minutes, and action/decision logs for each meeting will be prepared by Carollo and distributed to all project team members.

Task 1 Deliverables

- Meeting agenda and minutes (electronic)

- Progress summary letters with invoice
- Overall project updates at progress meetings

TASK 2 – DATA GATHERING, SYSTEM RECOGNITION, AND STRATEGIC PLANNING FRAMEWORK

Task 2 involves the gathering of information necessary for execution of the project, its processing, and analysis. This will result in the definition of a framework for the evaluation of the collection system under the prospective MLS bypass. Specific items included in Task 2 are detailed in the subtasks described below.

Subtask 2.1 – Data Gathering

Carollo will develop a comprehensive data request list broken down by task. Data shall be collected by the District and provided to Carollo in batches, and may be lumped along other not requested information if necessary. Carollo will extract necessary items and identify gaps, if any. Data sources may include but are not limited to:

- Existing GIS sewer geodatabase
- General area GIS data (service area, parcels, existing and future land use)
- Partial hydraulic models or processed shapefiles used in past modeling endeavors (LS 82, LS 114)
- Bulk/wholesale utility service agreements, as applicable
- Permits and historical DMRs or WRF influent SCADA data
- Pump station data including wetwell dimensions, number of pumps, pump curves
- SCADA flow and runtime data of MLSs and select LSs, in hourly intervals
- As-built drawings for master lift stations and WRF headworks/connection to collections
- Latest traffic analysis zone (TAZ) population estimates (Palm Beach County and Martin County)
- Any adopted performance criteria or design standards, including water/wastewater level of service by land use or type of service, maximum pipe velocities, standard pipe cover depth, etc. This will be discussed at a progress meeting, if necessary.

Where record drawings or information does not exist, Carollo with work with the District to agree upon the most reasonable assumptions possible in order to maintain progress on the project.

Subtask 2.2 – System Recognition

In this subtask, Carollo will:

- Delineate the prospective bypass influence area and understand connectivity among the basins. This exercise will determine the limits of the modeling exercise and the wastewater flow allocation procedures. This activity has taken place to a limited extent for the development of this proposed Scope of Work. However, it is not uncommon that the limits of the work as proposed differ after full completion of data gathering and analysis.
- Determine locations where the study would benefit from pressure field testing. Carollo will develop a pressure field testing plan and will provide District clear direction for pressure logger deployment at key locations. Carollo will provide up to twenty (20) pressure loggers for installation by District staff. Carollo will download and use the data upon District collecting the pressure loggers back from the field.

- Evaluate MLS operations and operations of all other stations with influence, based on available SCADA data. Operating trends and interdependencies will be identified, that will be used to program/simulate existing controls in the model. This will also help identify causes of issues like overflow risks, excessive pump cycling or continuous pumping, consistent use of redundant equipment meant for peak or emergency conditions, and need to reset pumps controls seasonally.

Subtask 2.3 - Strategic Planning Framework

The last years of historical wastewater flows, as available, will be reviewed and analyzed to develop relationships between flow, rainfall, and drought conditions. Population distribution and growth will be documented to generate a strategy to allocate wastewater flows at collecting basins and lift stations.

General wastewater flow projections for wet and dry conditions will be developed, as basis for projections (BEBR /TAZ data) is available. Historical SCADA data from the water reclamation facility will be utilized to develop peaking factors that will be used to evaluate the system and trace a strategic plan under various flow conditions. Historical SCADA data from MLSs and other stations as available, will be used to determine diurnal flow generation patterns.

Task 2 Deliverables

The District has requested that necessary documentation is condensed, and only practical information and decisions be included. A one-slide graphical summary, as possible, will be provided for each of the following findings:

- Dry/Wet weather flow relationships
- Existing population and flow distribution in the service area
- General wastewater flow projections
- General population growth and projected flow distribution (as available from BEBR/TAZ data, without accounting for local planned development and type)
- Peaking factors
- Diurnal flow generation patterns
- Decision/assumptions log associated with the above

This draft framework documentation will be presented to the District and discussed during a progress meeting. Revisions resulting from comments will be made. Because results of Tasks 3 and beyond are affected by the items listed above, consensus and approval of the Strategic Planning Framework will be necessary at this time.

TASK 3 - MODEL DEVELOPMENT AND ESTABLISHMENT OF BASELINE HYDRAULICS

Carollo will construct an Innovyze InfoWorks ICM model of the District's pressurized wastewater collection system using GIS databases provided by the District, information on vertical assets (such as lift station wet well depths, among others), operational data (such as lift station pumps elevation controls and pump curves), and planning framework data (such as wet weather peaking factors). Historical water reclamation facility flow and rainfall data will be analyzed to develop an understanding

of the system's typical base sanitary (dry) loads as well as its response to inflow and infiltration (I/I) during wet weather events.

The pressurized wastewater system (force mains and pump stations) affecting the Frederick Small and Central Blvd. Corridor and the N. Old Dixie Hwy/Glynn Mayo Hwy Corridor from Indiantown Road south to Frederick Small Road will be included in the wastewater model. That is:

- Affecting from the north: LS 70, LS 53, and all lift stations manifolded into their discharge force main, until its tie-in at the intersection of Indiantown Road and N. Dixie Hwy.
- Affecting from the east: LS 82 basin and all lift stations manifolded into its discharge force main until its tie-in at the intersection of Indiantown Road and Glynn Mayo Hwy (this basin will be brought into the model from a previous modeling effort by others).
- Affecting from the southeast: LS 114 basin and all lift stations manifolded into its discharge force main until its tie-in at the intersection of Frederick Small Road and Alternate A1a S/Glynn Mayo Hwy (this basin will be brought into the model from a previous modeling effort by others).
- Affecting in the south: LS 200 basin, and 1) all lift stations interconnected with it along Frederick Small Road, 2) all lift stations interconnected with it along S. Central Boulevard and Indian Creek Parkway (including apparent diversion to LS1 through Pine Tree Trail), and 3) downstream system along the remaining route to the WRF.

Gravity portions directly affecting the capacity of the corridor will also be included in the model, such as:

- 36 inch diameter gravity pipe along W. Indiantown Road connecting the corridor with LS 1, and
- The apparent diversion/loop from the south/LS 200 into the 36 inch gravity at W. Indiantown Road (which discharges into LS 1).

To complete the model, LS 1, its discharge forcemain along W. Indiantown Road, Central Boulevard, and Jupiter Park Drive (up to the WRF headworks), and all manifolded lift stations along this route will be included. A preliminary map of this area of influence will be facilitated upon project kickoff, along with the data request list.

Normally open and normally closed valves along the described routes will need to be identified and included in the model as well.

Since the majority of the gravity sewer will not be included, wastewater loads generated at gravity points upstream of lift stations will be applied at the receiving lift station. If the receiving lift station is not included in the model, such wastewater load will be applied at the first repumping lift station that is present in the model. Similarly, private lift stations will not be included in the model, but their flow (estimated from population/flow allocation) will be applied at the nearest downstream simulated lift station. This task will be broken down into four subtasks as follows:

Subtask 3.1 – Hydraulic Model Build – Physical Attributes – From GIS

In this sub-task, Carollo must make use of the GIS data processed by subconsultant FTC. Subconsultant will use the raw GIS database provided by District to:

- Fix pipeline connectivity
- Add direction of flow
- Define vertical datum and elevations
- Define pipeline-lift station-pumps relationships
- Create attributes for vertical assets such as pumps, pressure junctions, and typically operated valves
- Create fields that allow for mapping of interconnected GIS attributes in InfoWorks ICM upon importing the GIS database

Carollo will program the import of the processed database into InfoWorks ICM, which will result in the creation of the model elements at their geographic location. Carollo will associate information in the database to physical attributes like wet well geometry, pump location and direction, pipes diameter, roughness, and length, and valves and junction elevation and type, among other. A model that is physically apt to accept wastewater loads will be the result of this subtask upon completion.

Subtask 3.2 – Hydraulic Model Build – Flow Allocation

Existing population and flow distribution in the service area, and diurnal flow generation patterns from subtask 2.3 will be applied to the hydraulic model in this subtask.

Flow (average daily, initially) will be allocated at flow generation points when present in the model, or at the first downstream collecting lift station physically present in the model. In order to complete this, different methodologies may be used that depend on the data types available. Data types may include:

- Population distribution by TAZ, further broken down by lift station basins or sewersheds, and modified by development density and land use
- Customer billing data, as available and applicable (given water service is not provided by the District)

The level of effort is comparable for each of these flow allocation methodologies. Advanced GIS techniques and spreadsheet tools are required.

After average daily flow is assigned, diurnal flow generation patterns will be applied at the same points of flow allocation to simulate flow variation throughout the day. This step will give the model an "EPS" denomination, which stands for Extended Period Simulation, or the ability to simulate changes over a 24-hour period or longer, as opposed to Steady State ("SS" denomination). Several combinations of flow patterns may be used to reflect the land use of the area.

A model that is able to accept operational input will be the result of this subtask completion.

Subtask 3.3 – Hydraulic Model Build – Operational Attributes – From SCADA, SOPs, and Field Testing Plan

Carollo will analyze SCADA data to determine operational trends and correlations among pumping operations and resulting system conditions. These trends and correlations will be used to program

necessary controls in the model. Standard operating procedures for the average flow day, as available, will also be used to program controls and dependencies.

Carollo will also associate information in the GIS database or in Excel spreadsheets provided by the District to model operational attributes like wet well level controls for pump startup and shutdown, pump curves (or pump down reports), pump drive types, existence of bypasses, and normal status of valves, among other.

Pumps head rating will be conceptually compared to the range of operating pressures obtained from the field testing plan to identify possible gaps and/or areas in most need of calibration.

A model that is generally apt for calibration will be the result of this subtask upon completion.

Subtask 3.4 - Establishment of Baseline Hydraulic Conditions - Calibration

In order to obtain a hydraulic model that closely mimics the District's collection system operations, the model needs to be reasonably calibrated. Carollo strives to develop stable models that are over 95 percent accurate for flow predictions and within 2-7 psi for pressure, subject to the quality of the data. In this subtask, Carollo will adjust appropriate variables to calibrate to the following 24-hour extended period patterns:

- Water Reclamation Facility influent flow
- Master lift station flows and daily average run times, depending on data availability
- Select lift station flows, depending on data availability
- Force main pressure

The calibration effort will be completed under average daily flow conditions. A calibrated model that is suitable to evaluate the collection system physically and operationally will be the result of this subtask upon completion. This wastewater model will serve as the basis of the assessments of the wastewater collection system and the MLS bypass.

Wet weather peaking factors (derived from October or November 2020 and historical influent flow to the WRF) will be applied to the calibrated baseline scenario to simulate conditions under maximum anticipated flows.

TASK 4 – BYPASS FEASIBILITY EVALUATION

With minimum modifications of the wastewater loads, the baseline calibrated scenario developed in Task 3 will double as the existing average daily flow scenario or the "before bypass" base scenario. A child scenario will be developed from that average daily flow scenario to investigate the MLS Bypass under existing dry and peak flow conditions. Preliminary feasibility will also be established by characterizing the right-of-way and the costs of the bypass route.

Subtask 4.1 – Development of Bypass Scenario (Physical, Flow, Operational)

Simulation of the bypass scenario will provide a detailed understanding of the benefits and operating conditions under which the bypass will be beneficial.

Initially, only physical changes will be made to a child of the existing average scenario. Infrastructure corresponding to the scenario where the MLS 1 will be bypassed will be drafted in the model. New pipe sets will be located, sized, and connected in accordance to District preferences until hydraulic assessments are performed in subtask 4.2. Operational and control sets will be created and initially populated to divert close to 75 percent of the flow otherwise going to the MLS. Operational and control mechanisms will be modified and/or refined upon subtask 4.2 assessments.

The MLS bypass scenario will be constructed as a child of the existing scenario, and will have two variations, one for average daily flow and one for peak hour flow. A peak flow scenario will test the bypass ability to handle additional I/I as calculated from wet weather inflow at the WRF.

Subtask 4.2 – Flow Diversion and Connectivity Assessment – Master and Major LSs Before and After Bypass

The following actions will be completed under this subtask, following the creation of the bypass scenario:

- Model testing of the initial bypass configuration under one projected wastewater flow condition to determine necessary bypass sizing and connectivity to comply with the District's long-term flow diversion objective (75 percent).
- Model testing of existing MLS pump performance (LSs 1, 200, 70, 53, 82, and 114).
- Modification and refinement of operational and control mechanisms in anticipation of new practical SOPs for the MLSs, for the existing average day flow scenario and the peak flow scenario.
- Other needs of the MLSs.
- Assessing the need for either a refined or a phased strategic plan in the future.

Subtask 4.3 – Right of Way Analysis

A desktop analysis of the bypass route identified by the District will be completed to identify potential limitations in terms of right-of-way, MOT, perceived length of pipe, need for restoration and community outreach, canal/intersection crossings, and potential permitting provisions or special requirements. This will be a high-level review of conditions in order to identify key elements or challenges that will need to be addressed in the future design project.

Subtask 4.4 – Opinion of Probable Cost of Bypass

A Class IV cost estimate of the bypass infrastructure will be developed. Cost estimates will be calculated for the recommended improvements based on pipe length, diameter, and material as simulated in the recommended scenario. Installation methods will be accounted for in the cost estimates. Pipe improvements may include both force main and gravity pipelines. Manholes will not be included in cost estimates when the deficiency relies on the gravity lines around and not on the manhole itself. Costs will be presented in 2020 dollars without escalation for future years.

TASK 5 – IDENTIFICATION OF OTHER REQUIRED SYSTEM UPGRADES

Upgrades may include construction of just the bypass. However, in the case that the feasibility of the MLS bypass is hindered by any new or existing hydraulic deficiency (i.e. upstream lift stations affected

by the change of head imparted by the bypass), corrective action through capital improvement projects will be necessary.

Subtask 5.1 – Identification of Impacts of Bypass on Upstream Lift Stations Operation and Force Main Capacity

Hydraulic deficiencies will be identified by evaluating the following against performance criteria:

- Impact of the MLS bypass and the ability of upstream lift stations to meet changing head requirements and level of service for its customers.
- Lift station capacity exceedances in the bypass scenario (compares the peak hour flow simulated for the existing scenario to the firm capacity).
- Force main capacity under peak and average daily flow conditions.
- Lift station pumping efficiency (pump runtime/cycling, wet well retention time, and overall pumps controls logic), under the bypass operational scheme for average and peak flow conditions.

Carollo will work with the District to determine appropriate performance and efficiency metrics/criteria for the wastewater collection system based on the District's and industry standards. Deficiencies will be documented in order of criticality. This task will be focused on identifying hydraulic limitation of pipes or pump stations. It will not include a detailed analysis or inspection of the pump stations.

TASK 6 – CAPITAL PROJECT IDENTIFICATION

Subtask 6.1 – Identification and Prioritization of Capital Projects

Existing assets likely in need of replacement due to the new hydraulic conditions, along with new capital projects that are needed to accommodate changes due to MLS bypass and flow diversion will be identified. New capital projects will be based on engineering and modeling analysis completed through Tasks 2 through 5. Priority of the listed projects will be assigned based solely on whether the project is needed under average daily flow, or under peak flow conditions.

TASK 7 - DOCUMENTATION

The results of the project will be summarized in a Draft and a Final Technical Memorandums, which will include:

- Introduction including general purpose and scope, and description of factors affecting the District's drivers and need for a strategic plan to carry out the MLS Bypass improvement project.
- Condensed strategic plan framework, which shall include:
    - Task 2 Deliverable (refer to Task 2) and other parameters used to create and set up model scenarios,
    - Calibration setup and accuracy, and
    - Selected performance metrics/criteria for evaluations and analyses.

    - Results of the Bypass Feasibility Evaluation
- Recommendation of system upgrades.

Carollo will focus on presenting information in graphics and maps rather than using primarily report text. Detailed tables will be used to summarize projections by basin, project sizing, cost estimates, and the basis for recommending individual projects or deflections from initial District preferences. Carollo will prepare a full-size capital improvement needs map.

Carollo will review this map and recommendations of the Technical Memorandum in a meeting with District staff. Following the review meeting, District staff will be asked to provide comments on the Draft Technical Memorandum.

Upon receipt of District comments, the document will be revised based on the comments and a final version will be issued.

PROJECT SCHEDULE

Our team is prepared to start immediately. The overall schedule for this work order is ten (10) months after notice-to-proceed. A detailed project schedule will be provided at the project Kickoff Meeting.

DISTRICT RESPONSIBILITIES

Because of the nature of this project, certain assumptions apply to this Scope of Services. To the extent possible, these assumptions are stated within this document and are reflected in the budget. If the project task requirements are different from the assumptions presented in this Scope of Services, or if the District desires additional services, the resultant change in scope will serve as a basis for amending this project assignment or initiating the development of a new project assignment as agreed to by both the District and Carollo. The following assumptions and District responsibilities apply to this project:

- Carollo shall be entitled to rely upon the accuracy of the data and information supplied by the District without independent review or evaluation.
- The District shall attend all workshops and review meetings to maintain the progress of the project according to the schedule.
- The District will provide Carollo with access to facilities/sites for data gathering and data validation.
- The District will assist with field testing as necessary, including making personnel available for the installation of pressure/data loggers, and accompanying Carollo on site visits.
- The District will provide all required information within reasonable time, which is considered no longer than 2 weeks, after notice to proceed. The schedule is based on timely receipt of data and may shift due to data requirements. The District shall review Draft deliverables and provide comments to Carollo within a two-week period.

PROJECT FEES

We propose to conduct the requested work for the total lump sum fee of $206,344, which includes $191,344 of Carollo fees and $15,000 of GIS sub consultant fees.

Payment will be billed to the District based on the hourly rates shown in Attachment A. Attachment A provides the level of effort estimated for each task and subtask.

We appreciate the opportunity to continue to support you with this important project and look forward to working with the District. Please let us know if you have any questions.

Sincerely,

CAROLLO ENGINEERS, INC.

Elizabeth Fujikawa, PE.
Vice President

LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: D. Albrey Arrington, Ph.D., Executive Director

FROM: Kris Dean,P.E.,Deputy Executive Director/ Director of Engineering Services

DATE: February 12, 2021

SUBJECT: Portable Generator Purchase/R21029: Piggy Back Contract

Part of our emergency response plan includes mobilizing a fleet of portable generators into the field to provide power to our lift stations in the event major power outage.

The District currently maintains a fleet of 49 portable generators two of which have reached the end of their useful life. We are proposing to replace these generators. Both replacements are upgraded portable pump packages including sound attenuated enclosure for use in sound sensitive areas such as residential neighborhoods.

The District will "piggy-back" on the existing Florida Sherriff Association, and the Florida Association of Counties (FSA&AC) contract with ACF Power Systems for two 44 KW trailer mounted generators.

Staff recommend the following motion.

"THAT THE DISTRICT GOVERNING BOARD authorize the "piggy-back" of the Florida Association of Counties (FSA&AC) contract with ACF Power Systems, Inc. for two 44 KW trailer mounted generators as detailed in their quote dated February 3, 2021 in the amount of $81,200.00."

2500 Jupiter Park Drive
Jupiter, Florida 33458

TEL: (561) 747-5700

FAX: (561) 747-9929

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Date: February 3, 2021

Reference: Loxahatchee River Environmental Control District – Mobile MMG55DF4

We are pleased to offer the following quote for the above project:

FSA20-EQU 18.0 HEAVY EQUIPMENT
150KW Mobile Generator Package Item 120

ITEM I

- **150KW Mobile Generator Package Item 120 FSA20 Generac MDG175DF4…… $ 85,200.00**
- **Downgrade to MMG55DF4 ……..$- 44.600.00**

Sub-Total: $ 40,600.00

ITEM II

- **150KW Mobile Generator Package Item 120 FSA20 Generac MDG175DF4…… $ 85,200.00**
- **Downgrade to MMG55DF4 ……..$- 44.600.00**

Sub-Total: $ 40,600.00

Total investment for the above equipment (Not including any applicable tax): ……..$ 81,200.00

MMG55DF4
120/208,120/240,277/480- 3 phase- 48kwStandby 44kw Prime
120/240 - single phase - 46kwStandby 42kw Prime

Quantity 1 - Generac Mobile diesel engine-driven generator set MMG55DF4, consisting of the following features and accessories:

- 55kVA (44kW) Rating
- Prime Duty Power rating
- 4-Position Voltage Changeover Switch
  - 480V Three Phase
  - 208V Three Phase
  - 240V Three Phase
  - 240V Single Phase
- John Deere 3029HFG03 Engine
  - Turbocharged/Aftercooled
  - EPA Final Tier 4 Approved
- Digital Controls
- Single Axle Trailer
- Flat 4 to Round 7 Spade Adaptor
- Surge Brakes

- 3" Ring - 1.63" Diameter
- Fuel Tank - Single Wall, 106 Gallon
- 720 CCA Wet Cell Battery
- 10 Amp Battery Charger
- Control Panel Light
- Interior Cabinet Light
- CSA
- Fluid Containment
- Standard Engine Cooling Fan
- Battery Disconnect
- Engine Coolant, 50% Ethylene Glycol/50% Water
- MMG55DF4

Delivery to Jobsite Off Loading by others

Clarifications and Exceptions:

- No Enclosure Wind Load P.E. Calculations. Optional adder.
- Buyers referenced to local, state, or federal government requirements.
- No Anchoring Calculations and/or anchors.
- No Offloading.
- No installation.
- No rigging.
- No power systems or selective coordination study.
- Equipment performance beyond manufacturer's design.
- No Storage or insurance.
- No third-party electrical apparatus testing / inspections, and/or special testing (emissions, noise, harmonics, etc...
- NO NETA Testing Must be performed by third party agency.
- No Special testing equipment (oscilloscope, thermal camera, harmonic analyzer, etc...
- No general, civil and/or plumbing work or materials.
- No electrical and/or mechanical work including materials.
- No engineering or permitting.
- No third-party testing agency.
- No Sound Testing by ACF.
- No fuel or equipment rental.
- No Sub-base in field pressure integrity testing.
- No Maintenance Contract by ACF.

Notes

1. This Quotation is based upon Engineering Specifications __N/A_____ & Drawings N/A. No other sections shall apply. Based of sizing by engineer
2. Quotation is valid for 60 days. If not released to production within 60 days, pricing, delivery extension and escalation charges may apply.
3. ACF Standby Systems is not responsible for any delays in delivery due to Act of Nature, explosion, fire, strikes, accidents, war, terrorism, flood, accidents or other causes beyond our company control. Quoted shipping schedules are not guaranteed and subject to change without notice. In no case is ACF Standby Systems responsible for incidental or consequential damages.
4. ACF Standby Systems does not accept liquidated damages as a part of third party contracts.
5. Equipment will be invoiced (and payment expected according to ACF's Terms and Conditions) at the time of shipment or when ready to ship from point of origin. Delays by the buyer may result in storage fees and/or additional freight charges.
6. The warranty is that of the above-named manufacturer(s). Refer to the manufacturer's warranty statement for details. No special warranty is implied. The Manufacturer's warranty begins on the day of start-up or 6 months after shipment, whichever occurs first, not substantial completion. It is the contractor's responsibility to coordinate start-up along with the date of substantial completion.
7. If the generator set is not installed and ready for startup within 6 months of shipment it will require long term storage procedures. Please refer to the Operation and Maintenance Manual for such requirements.

All costs related to long term storage is the responsibility of the purchaser. Failure to follow these procedures may void warranty and affect equipment operation. Contact ACF Standby Systems for assistance.

8. Additional sets of O&M manuals are available at an additional cost. The manufacturer's standard format shall apply. Custom O&M manuals will be available at an additional charge.
9. Startup services will not proceed until the buyer's account is current and in good standing.
10. Quotation does not include offloading, rigging, anchoring, installation, exhaust plumbing, exhaust insulation, fuel or permitting.
11. ACF Standby Systems is not responsible for testing of fuel tank(s) provided by any party. Fuel tank testing, as required by FDEP (Florida Department of Environmental Protection) Chapters 62-761 and 62-762, is the responsibility of the installing Contractor and Generator Permit Applicant. ACF Standby Systems LLC is not responsible for damages or costs incurred by any party, when a fuel tank is filled before field testing required under FDEP or testing mandated by a Local Inspector of Authority under FBC, is performed.
12. Pricing is subject to ACF Standby Systems Payment Terms.

Terms and Conditions
This proposal is subject to ACF Terms and Conditions of Sale, attached.

Sincerely,

John Agnes

ACF, Inc.
ACF Standby Systems
Power Generation
www.ACFStandbySystems.com

John Agnes
Sales Engineer
Mobile (352) 277-6403
Fax (813) 621-6980
Email j.agnes@acfpower.com
Connect

Acceptance of Quote
Prior to ordering equipment or services, please sign and return as a confirmation of the content of this proposal and the attached terms and conditions
Customer Signature

_____

LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: GOVERNING BOARD
FROM: D. ALBREY ARRINGTON, Ph.D.
DATE: FEBRUARY 11, 2021
SUBJECT: PUBLIC PARTICIPATION AT PUBLIC MEETINGS POLICY

Based on recent discussions with the Board, I have drafted the following Public Participation at Public Meetings Policy for your consideration. The purpose of this policy is to demonstrate the Governing Board's commitment to providing the public with a reasonable opportunity to provide public comment on propositions that come before the Governing Board and Advisory Committees subject to the Sunshine Law (e.g., Administrative Committee).

You may recall that public comments at our public meetings are governed by Florida Statute 286.0114 and our Rule Chapter 31-1. For convenience, I have provided relevant portions of these documents following our draft policy.

Mr. Shenkman has reviewed the draft policy and found it to be legally sufficient for your review and consideration.

Therefore, I request your approval of the following motion:

"THAT THE DISTRICT GOVERNING BOARD ratifies the attached, updated version of the Public Participation at Public Meetings Policy and delegates authority to the Executive Director to revise and implement revisions to this policy to maintain compliance with Federal and State law."

2500 Jupiter Park Drive
Jupiter, Florida 33458

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loxahatcheeriver.org

PUBLIC PARTICIPATION AT PUBLIC MEETINGS POLICY

Purpose

The purpose of this policy is to demonstrate the Governing Board's commitment to providing the public with a reasonable opportunity to provide public comment on propositions that come before the Governing Board and Advisory Committees subject to the Sunshine Law (e.g., Administrative Committee).

Policy

The Loxahatchee River Environmental Control District (District) is committed to transparent and effective communications with the public, freedom of speech, and First Amendment rights. Effective communication includes listening; therefore, the District is intentional in maintaining compliance with Section 286.0114 of the Florida Statutes and District Rule Chapter 31-1.002(11) regarding the public's reasonable opportunity to be heard on a proposition before the Board and Advisory Committees subject to the Sunshine Law.

The public is encouraged to provide public comments in advance of meetings via the District's Public Comment Form. Public comment also may be provided in-person at a public meeting. Anyone needing ADA accommodations to attend a public meeting or submit public comments, please send an e-mail to info@lrecd.org or contact the Director of Finance & Administration at 561-401-4095.

Procedures

Public comment may be provided in the following manner:

1. Members of the public are encouraged to submit written public comments via the District's Public Comment Form. Written public comments must be received at least three hours prior to the start of the public meeting to ensure dissemination to the Board or Advisory Committee prior to the meeting. Written public comments will be shared with the Board or Advisory Committee for review. Written public comments will not be read aloud in the public meeting but will be included in the meeting minutes.
2. Members of the public may attend public meetings and provide public comment in-person for all consent, regular, and public hearing items. In-person public comments may be given at the following opportunities:
    a. Under the agenda item "Comments from the Public". Public comments are intentionally welcomed at this point in the agenda and may address any topic including specific agenda items or items not on the agenda.
    b. Public comment will be received prior to acting on the consent agenda and each regular agenda item.

Authority: Florida Statutes 286.0114; LRD Rules Chapter 31-1
Date Approved by Governing Board: TBD

All members of the public providing public comment to the Governing Board or Advisory Committee must abide by the following procedures:

1. Members of the public wishing to provide in-person public comment must fill out a "Public Comment Card" indicating the speakers legal name, residence address, position on a proposition, and to indicate if member of the public is making a designation of a representative speaker.
2. An individual has three (3) minutes to address the Board. A timer may be used to signal the end of the allotted time period to provide comment. Speakers must stop at the end of their allotted time, and yield the floor to the chair of the meeting.
3. Speakers may speak once per agenda item and may not yield their time to another person.
4. A designated representative of a group or faction that is in attendance in person at the public meeting may address the Board, rather than all of the members of the group or faction, and has six (6) minutes to address the Board.
5. Speakers will be acknowledged by the Chair in the order in which Public Comment Cards were received by the Chair. Speakers must begin their public comment by first stating their legal name and address.
6. Speakers are to address the Governing Board as a whole; comments should not be directed towards individuals.
7. Speakers commenting on an agenda item must confine their comments solely to the agenda item being discussed.
8. Speakers must limit their remarks to matters related to the business of the District.
9. Public comment is not intended to be an interrogation or require a back-and-forth commentary. Speakers may pose questions, but the Board, Committee or staff in attendance have no obligation to provide an answer, comment or respond in any manner.
10. Discussions between speakers and members of the audience will not be allowed.
11. Speakers must not use profane language or abusive comments.
12. Any action on items brought up during public comment will be at the discretion of the Board. Neither the Governing Board nor any Advisory Committee will take any action on subject matter for which it has not had the opportunity to fully investigate and gather complete information.

Definitions

List definitions necessary to understand the policy statement (section above).

A. Advisory Committee: A committee with authority to assist in the Governing Board's decision-making process (e.g., Administrative Committee). An individual or body whose sole function is to gather information is not an Advisory Committee.
B. Sunshine Law: Also known as Florida's Government in the Sunshine Law, is a series of laws (i.e., Chapters 286 & 119, Florida Statutes) designed to guarantee public access to governmental bodies and public records in Florida.

Relevant Procedures

The following procedures guide staff in the appropriate implementation of this policy:

A. TBD

Relevant Policies

The following policies may relate to this policy:

A. Public Records, Record Retention, And Disposition Policy (LRD-POL-FIN-03.00)

Applicability

This policy applies to LRD public meetings at which public comment may be received and may be enforced by the chair of said meetings.

Consequences

A member of the public that violates these policies at a public meeting may be directed by the chair of said meeting to:

1. Stop their comments upon the expiration of their allotted time.
2. Refrain from violating the above stated procedures.
3. Return to their seat.
4. Yield the podium to the next speaker.
5. Request they leave the meeting room if their conduct is disrupting the meeting.
6. Warn that refusal to stop disrupting the meeting may result in the local police, sheriff and/or private security being called to escort the disruptive person(s) from the meeting.

When deemed necessary by the meeting chair, a member of the public may be removed from a public meeting.

Policy Questions

Questions regarding this policy should be directed to the author listed above.

(11) Public comments – Florida Statutes 286.0114, states the Governing Board must provide members of the public with a reasonable opportunity to be heard on a proposition before the Board. The opportunity does not have to occur at the same meeting where the Board takes official action on an item, whether by formal vote or other final action. The opportunity must occur at a meeting that is during the decision-making process, and the opportunity must be within a reasonable proximity in time before the meeting at which the Board takes official action. The Board shall maintain orderly conduct and proper decorum in a public meeting, and hereby establishes these rules on the public providing testimony:

(a) an individual has three (3) minutes to address the Board.

(b) a designated representative of a group or faction may address the Board, rather than all of the members of the group or faction, and has six (6) minutes to address the Board.

(c) a "Public Comment Card" shall be made available for members of the public desiring to give public comment, indicating the speakers legal name, residence address, position on a proposition, and to indicate if member of the public is making a designation of a representative speaker.

(d) the requirement to provide a reasonable opportunity to be heard does not apply under the following circumstances:

(i) when an official act must be taken to deal with an emergency situation affecting the public health, safety or welfare, if compliance with the public comments requirement would cause an unreasonable delay in the ability of the Board to act;

(ii) for an official act involving no more than a ministerial act, including but not limited to approval of minutes and ceremonial proclamations;

(iii) at a meeting during which the Board is acting in a quasi-judicial capacity with respect to the rights or interests of a person; and

(iv) at a meeting that is exempt from the Sunshine or Open Meetings Law (section 286.011, Florida Statutes).

(e) By the Board adopting these rules for public comment, the Board is deemed to be acting in compliance with Florida Statutes 286.0114. Any action taken by the Board that is found to be in violation of the opportunity to be heard is not void as a result of the violation.

FS 286.0114 (4) Rules or policies of a board or commission which govern the opportunity to be heard are limited to those that:

(a) Provide guidelines regarding the amount of time an individual has to address the board or commission;

(b) Prescribe procedures for allowing representatives of groups or factions on a proposition to address the board or commission, rather than all members of such groups or factions, at meetings in which a large number of individuals wish to be heard;

(c) Prescribe procedures or forms for an individual to use in order to inform the board or commission of a desire to be heard; to indicate his or her support, opposition, or neutrality on a proposition; and to indicate his or her designation of a representative to speak for him or her or his or her group on a proposition if he or she so chooses; or

(d) Designate a specified period of time for public comment.

LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: Governing Board

FROM: Kara Fraraccio, Director of Finance and Administration

DATE: February 12, 2021

SUBJECT: Disposal of Fixed Assets

Whenever the District disposes of tangible personal property of a non-consumable nature, Florida Statutes and our Disposal of Surplus Tangible Personal Property Policy require Governing Board approval before any Surplus Tangible Personal Property can be disposed of. Therefore, consistent with state statute, our policies and procedures, I request your authorization to dispose of the items listed below:

Tag #	F/A #	Description	Condition	Date Recorded	Acquired Value	Book Value	Estimated Value
1643	PE8	100 KW Generator	Needs Repair	09/30/89	$ 33,620	$ -	$ 1,500
1642	ME16	15 KW Generator	Needs Repair	09/30/93	12,285		500
Total Assets to be Disposed					**$ 45,905**	**$ -**	**$ 2,000**

The items listed in the schedule above are no longer of use to the District and are considered Surplus. They will be disposed of in accordance with the District's Disposal of Surplus Tangible Personal Property Policy.

Items slated for disposal that have remaining value will be sold on GovDeals or sold as scrap metal. Items slated for disposal that have no remaining value will be recycled or otherwise disposed of in an environmentally conscious manner.

If you have any questions, please feel free to contact me.

I offer the following motion for your approval:

"THAT THE GOVERNING BOARD authorize the Executive Director to dispose of tangible personal property including asset tag numbers 1643 and 1642 in the schedule above."

2500 Jupiter Park Drive
Jupiter, Florida 33458

TEL: (561) 747-5700

FAX: (561) 747-9929

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Change Orders

No Change Orders are presented for Board consideration this month.

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LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971–2021

MEMORANDUM

TO: GOVERNING BOARD

FROM: D. ALBREY ARRINGTON, Ph.D.

DATE: FEBRUARY 12, 2021

SUBJECT: RULE 31-10 RATES, FEES, & CHARGES – RATE STUDY

This is the time of year we discuss our annual rate study. Through the Rate Study process, LRD staff looks out into the future anticipating significant projects and costs and balancing our financial position with an effective, just and equitable rate structure. Throughout this process we understand your desire to achieve operational excellence (e.g., system reliability, satisfied customers, strong employee morale) while maintaining a reasonable rate structure.

The annual Rate Study Model is a spreadsheet model we use to assess the long-term fiscal position of LRD. The model uses an annual time step and includes terms for expected development within our service area (i.e., customer growth), and the model has explicit terms for operational and capital revenues and expenses. The Rate Study Model provides useful estimates of future budgetary conditions. This year, the Rate Study is based on the following general assumptions:

1. **Revenue from Quarterly Service Charges** – is projected to increase at a rate of approximately 3% to 4% for the next several years based on anticipated growth within our customer base and adopted District Rule 31-10 scheduled rate increases. Projected rate increases are 2% for each of the next two years and 3% for each of the following 3 years. We raised this rate by 1% on April 1, 2020.

2. **Revenue from New Development (Plant and Line Charges)** – these revenues are paid by new customers (i.e., new development) and represent new customers paying for their fair share of existing infrastructure needed to serve them (i.e., a new home connecting to the sewer system pays for the tiny fraction of the wastewater treatment facility needed to accommodate their wastewater). Moving forward, this source of revenue is projected to provide approximately 3% of our revenues, which is significantly down from the 15% provided in 2005.

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3. **Service Availability Standby (SAS) Revenue** – projected to continue a slow, gradual decline, which has been occurring as our service area is nearing built-out conditions.

4. **IQ Water Revenue** – our IQ revenues have been adjusted to reflect revision of the Sonoma Isles contract. This is the first year in quite a while that we will adjust our IQ Rates during the annual rate study process (rather than increasing them based on an index).

5. **Miscellaneous Revenues** – these relatively small revenues (~$200k) derived from cell tower lease, estoppel, sale of surplus equipment, and grants are expected to remain relatively stable.

6. **Interest Revenue** – are expected to earn an interest rate of 0.5% in 2021 and beyond. While recent economic data has hinted that inflationary pressures may be building, there is no clear evidence that justifies projecting increased interest rates over the time period in the rate study.

7. **Operating Expenses** – I have anticipated no increase in budgeted operating expenses between FY2021 and FY2022. Subsequent to FY2022, I have projected operating expenses to increase around 3.0% per year. There are large uncertainties around the expectation of inflation, but at this time I believe projecting annual cost increases near 3% is prudent.

8. **Neighborhood Sewering Expenses** – Staff are anticipating approximately $2 million in costs to make gravity sewers available in Rolling Hills – the last significant, scheduled neighborhood sewering project. Subsequently, we anticipate this budget category to shrink to a very small number as we address the few remaining outlier properties in the urban portion of our service area that still need a sewer service.

9. **Gravity Sewer System Improvements** – We are projecting capital expenditures of nearly $1.5 million per year as we continue to rehabilitate our aging collection system (gravity laterals, gravity mains and manholes). Among the most critical tasks at hand over the coming years is systematically cleaning and inspecting our sewage collection system and then rehabilitating (often using structural liners) the portions of our system that are showing signs of failure or degradation.

10. **Sewage Pumping Station Improvements** – Over the coming three years, staff project $750k per year in costs to upgrade and rehabilitate our pumping stations. This work is critical as we maintain aging infrastructure and work to improve resilience of our critical wastewater pumping systems. Notable projects include adding communication equipment (telemetry) at all of our lift stations (~$2 million), permanent generator installations at our most critical lift stations ($250k per year). These major investments in our assets are squarely in line with our current strategic plan.

11. Force Main Improvements – Over the next 3 years staff anticipate spending nearly $1.5 million per year to upgrade and improve resiliency of our wastewater transmission system (i.e., force mains). Such efforts include minimizing the number of pump stations that re-pump wastewater, adding redundancy (where feasible) to our force main network, testing, and rehabilitating aging force main infrastructure. This month we are seeking Board approval of a hydraulic modeling study, which will facilitate our bid-picture approach to improving resiliency and redundancy in our wastewater transmission system.

12. Treatment Plant Improvements – Staff are allocating approximately $400k per year to rehabilitate and upgrade machinery and equipment in our wastewater treatment plant. Staff anticipate completion of the greenhouse gas emissions study (under separate tab in the Board Notebook), will generate over $1 million in potential renovations and upgrades within our wastewater treatment facility. Also, staff are anticipating upgrades and improvements to our odor control facilities (~$250k).

13. I.Q. System Improvements – Improved monitoring and rehabilitation of our I.Q. Water System are projected to cost approximately $500k per year over the next several years.

14. Biosolids System Improvements – In addition to normal rehabilitation efforts, staff anticipate spending $250k to improve odor control system associated with our on-site biosolids processing. Also, staff are beginning to consider the need for significant revisions to our biosolids treatment process, which if pursued could generate costs exceeding $2 million.

15. Public Education – Presently, we are awaiting approval of our draft revised enabling act. At this time, the only major public education capital project in the Rate Study is $500k for work associated with the two houses on the Bureau of Land Management (lighthouse) property. If the legislature approves our revised enabling act, we will more diligently consider costs associated with relocating the River Center to our 20 acres in Jupiter Farms.

16. Bonds – All of our bond debt has been retired, and no additional debt is projected at this time.

Looking further out, staff have identified a number of large cost items and have added place holders to the rate study to ensure they are addressed in the coming years. These projects include:

A. Biosolids Processing and Recycling Facility – In 2005, the District entered into an interlocal agreement with the Solid Waste Authority (SWA) to fund a portion of the cost to design, build, and operate a Biosolids Processing and Recycling Facility (BPF). The District owns 8.96% of the facility's total capacity. The District's capital costs to date for the facility equal $3,464,940. The

interlocal agreement terminates on August 9, 2029. At that time, the partners shall agree to continue operating the facility (anticipate capital costs to rehabilitate and upgrade the facility) or decommission the facility (anticipate costs to demo the facility and costs to design, permit, construct, and operate a new facility). At this time, SWA and its partners are assuming we will continue operation of the facility, and I have inserted a capital cost place-holder of $1 million into the rate study for these costs in FY2028.

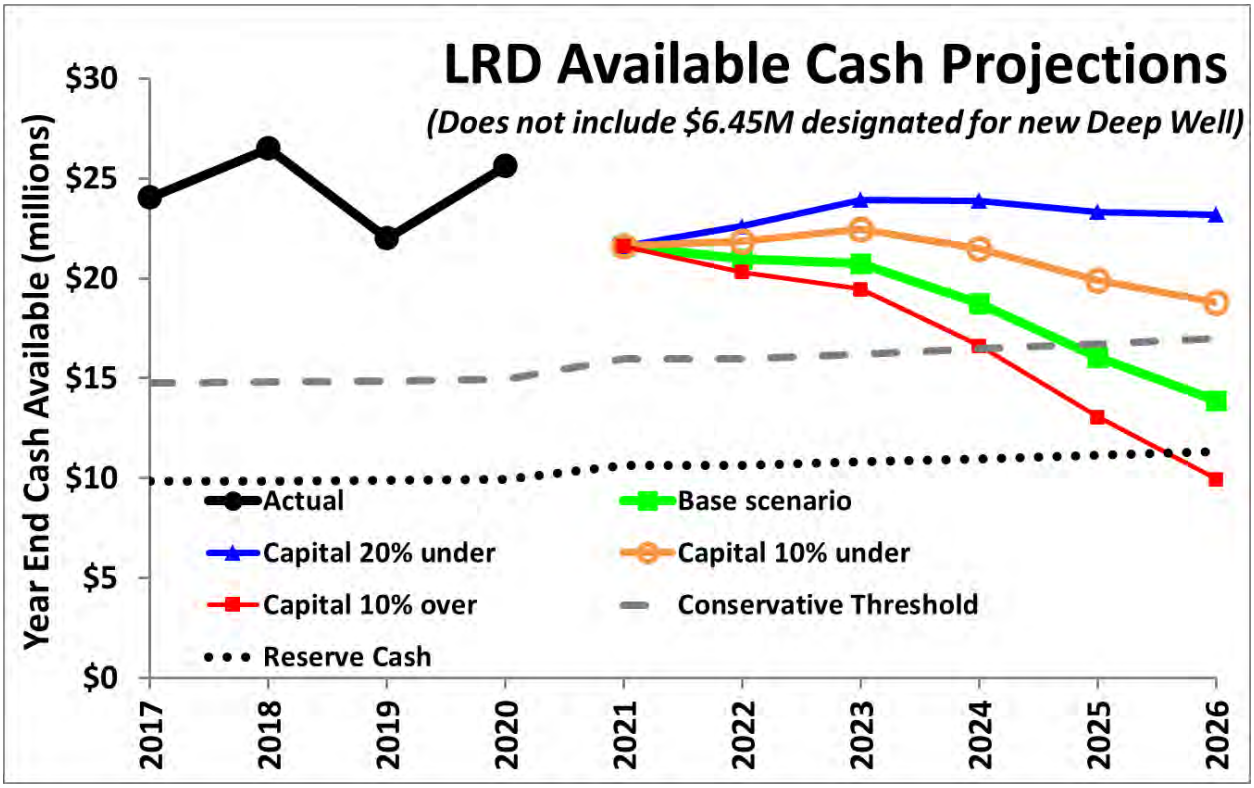
B. LRD Solar – As global climate change is coming more and more into focus, it seems the LRD should begin contemplating specific actions to mitigate our contributions to climate change and increase our resiliency to anticipated impacts. With this in mind, I have inserted $8 million into the Rate Study over the period 2029 to 2032. I am not suggesting we need to take action on this at this time, but by placing this in the Rate Study it forces staff to work to better understand the issues and anticipated costs as the time draws nearer.

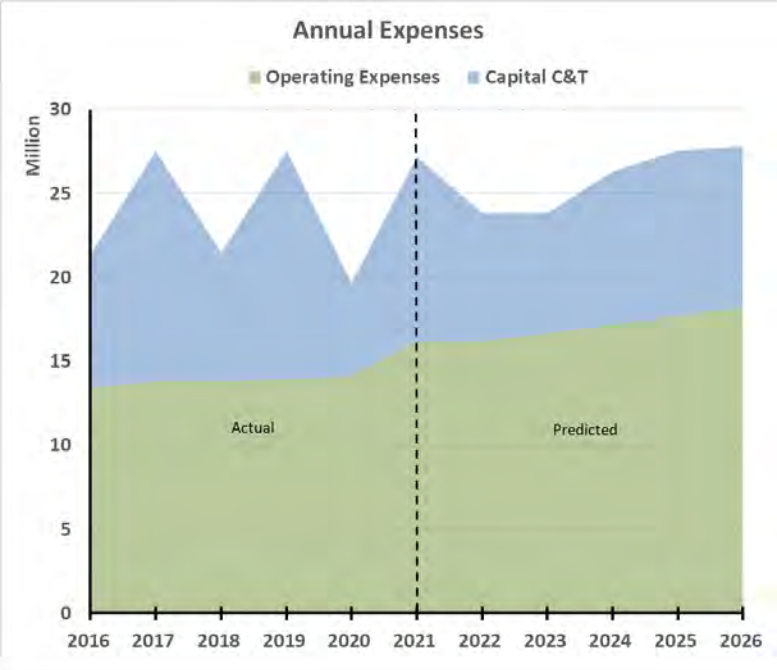
C. New Deep Injection Well or Aquifer Storage and Recovery (ASR) Well - In accordance with Kara's monthly financial reports, we have designated $6.45 million towards a new deep injection well or ASR well (see pie chart on page 2 of Kara's monthly financial report). While this money remains in our enterprise account, the Year End Total Cash from the Rate Study does not include the funds 'set aside' for the Deep Well.

Given all the various assumptions in the Rate Study Model (explained above), the chart on the following page shows our projected year end available cash through 2026. Actual values are shown for the period 2017 through 2020. Budgeted estimates are shown for 2021. Rate Study model projections are shown for 2022 through 2026. These projections include the rate increases approved by the Board last year and assume an additional 3% rate increases in 2025 & 2026.

This year I wanted to illustrate the impact of not spending all of the money that was budgeted for capital projects. As you can see, our long-term financial position is significantly impacted if our actual expenditures fall below our rate study and budget estimates. The blue line below shows future projections if staff only spend 80% of funds estimated in the rate study (i.e., projects are completed under budget, more cost effective designs or approaches are realized between rate study and project completion). In fact, this appears to explain performance of the rate study over the past several years because we have characteristically underspent our annual capital budget. Moving forward, staff are working to better estimate projects, their timelines and associated costs as we continue to work to improve our rate study process.

The red line in the chart below provides a cautionary note. Here, I estimated the long-term impact of consistently spending 10% over our rate study estimate, and you can see the negative impact to our financial position.





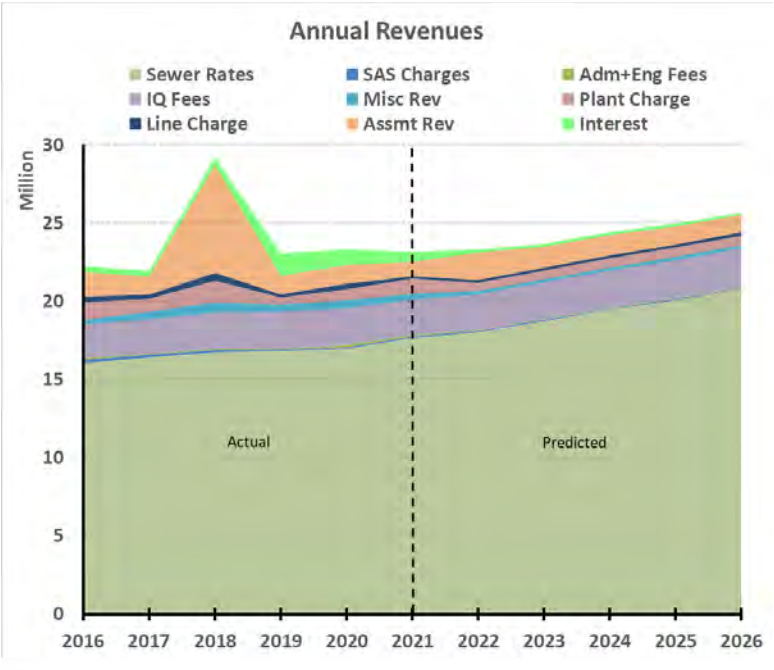
The chart to the left shows our annual operating and capital expenses for fiscal years 2016 through 2026. The chart at the bottom of the page shows annual revenues by category for fiscal years 2016 through 2026. In both charts, actual values are plotted prior to FY2021, and predicted values are plotted after FY2021. Budget values are plotted for FY2021.

This month, I had hoped to carefully evaluate expenses and revenues between major cost centers (e.g., wastewater collection and treatment; IQ Water treatment and distribution) and to characterize the major elements of costs. Unfortunately, I was not able to get work done this month. I look forward to presenting some of these data to you next month as we continue our work to set just and equitable rates.

Your staff takes pride in providing excellent service and value to our rate payers. We understand your desire to operate as efficiently as possible, but we also recognize the expectation to provide award-winning service. We look forward to discussing this rate study with you, and better understanding your preferred direction as we work to serve our customers.

No action is necessary this month. We will return to your March meeting with a recommended action based on input and feedback received from the Board this month.

Thank you, and please feel free to call me if you have any questions.



LOXAHATCHEE RIVER DISTRICT

Neighborhood Sewering Schedule-Revised February 2020

Rank *	Area Description	# Lots	Activity	Original Target Date	Revised Target Start Date
16	181st St N Gravity	12	Notified Owners – January 2013 Notice of Intent to Assess – October 2018	2018	2021
11	Jupiter Farms (East)	708		TBD	TBD
11	PB Country Estates	1547		TBD	TBD

* Rank based upon "2010 Septic System Inventory & Assessment"
TBD = To be determined

Remnant Areas

Rank*	Area Description	Lots	Activity	Original Target Date	Revised Target Start Date
H	Olympus Dr, Juno (LP)	2	Notified Owners – June 2013 Prelim. Design started – August 2017 Notice of Intent to Assess – July 2020	2016	2021
	18870+18890 SE Country Club Dr (LP)	2	Notified Owner – April + Aug 2017 Design started – August 2017 Notice of Intent – December 2018	2018	2020
	Thelma Ave. (LP)	3	Notified Owners – September 2017 Notice of Intent to Assess–September 2019 Notice To Connect – February 2021	2020	2020
EE	Hobart St SE (Martin Co.) (LP)	13	Notified Owners – January 2013 Notice of Intent to Assess–September 2019	2016	2021
	197th Pl N (LP)	3	Notified Owners – April 2019 Notice of Intent to Assess – February 2015 Notice To Connect – February 2021		2020
	605+607 Military Trl (LP)	2	Notified Owners – June 2020 Notice of Intent – Jan 2021	2022	

Rank *	**Area Description**	**# Lots**	**Activity**	**Original Target Date**	**Revised Target Start Date**
AA	Peninsular Road	4	Private Road Notice of Intent – February 2010 Partial construction complete - June 2013 Soliciting easements for remainder of project	2010	AEO
BB	Rivers Edge Road (Martin Co.)	35	Notified Owners – August 2010 Private Road-Easements Solicited –May 2014 Notice of Intent – February 2014 Project Delayed	2013	AEO
CC	171st Street (Martin Co.)	7	Private Road - In House Design Owners notified October 2012 Easement rec'd from Church – April 2017 Grant received	2014	AEO
CC	Jamaica Dr	11	Private Road Owners notified Oct 2012	2014	AEO
CC	66th Terr+Way	19	Notified Owners – Aug 2010 *Private Roads Notice of Intent to Assess – February 2015	2014	AEO
D	Loggerhead Park *(institutional)*	6 ECs	Need Easements from County-No database	2014	AEO
DD	Taylor Road	38	Notified Owners – September 2011 Private Roads	2015	AEO
FF	Rolling Hills	50	Notified Owners – Jan. 2013 - Private HOA Notice of Intent to Assess – October 2019	2017	2021
FF	Gardiner Lane-18205 (LP)	1	Notified Owner – July 2013 – Private Road Notice of Intent to Assess – October 2019	2017	2021
FF	North A1A	3	Postponed-Town activities in area-No database	2012	AEO
GG	815 S US 1 (Yum Yum Tree)	9 ecs	Notified Owner – November 2014	2016	AEO
GG	Rockinghorse *(north of Roebuck Road)*	11	Notified Owners – January 2013	2018	AEO
GG	Island Country Estates	38	Notified Owners – January 2013 Notice of Intent – July 2018 Notified to Connect – August 2020 Final Assessment – January 2021	2018	2020
GG	Castle Rd SE	5	Notified Owners – Jan 2013-private road	2018	AEO
GG	Jupiter Rd SE	4	Notified Owners – Jan 2013-private road	2018	AEO
HH	Harbor Rd. S. LPSS	6	Notified Owners – January 2014 Private Road	2017	AEO
HH	Indian Hills SE	12	Notified Owners – January 2016 Easement for Road & Utilities, No Dedication	2019	AEO
16	Limestone Creek Road West	49	Notified Owners – January 2013 Private Road	2018	TBD
19	US Coast Guard Station Offices *(institutional)* PX Commercial *(commercial)*	 2 ECs 2 ECs	US Government - private roads-No database Contract for installation of sanitary sewers – September 2020	2019	2021

* Rank based upon "2010 Septic System Inventory & Assessment"
TBD = To be determined AEO = As easements are obtained

CURTIS L. SHENKMAN
Board Certified
Real Estate Attorney
HUNTER SHENKMAN
Attorney

CURTIS SHENKMAN, P.A.

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PALM BEACH GARDENS, FLORIDA 33410
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LEGAL ASSISTANTS
REAL ESTATE
JUDY D. MONTEIRO
DENISE B. PAOLUCCI
MELISSA KAJEEJIT

February 8, 2021

Loxahatchee River Environmental Control District
D. Albrey Arrington, Exec. Dir. and Board Members (sent by email to DHenderson)
2500 Jupiter Park Drive
Jupiter, FL 33458

RE: PENDING LITIGATION STATUS REPORT

Dear Dr. Arrington and Board Members:

We are enclosing herewith a brief status report relating to the litigation in which the Loxahatchee River Environmental Control District is involved with our law firm as the attorney of record. This status report updates the last monthly status report previously submitted and consists of a summary of the record proceedings which have occurred in each of the pending cases since last month.

There are no analyses of the pending cases included, as the inclusion of such items might constitute a waiver of any attorney/client privilege that exists between our firm and the District. Therefore, if you would like to discuss the particulars of any specific case in more detail or would like to obtain more information concerning the strategy, status, or settlement posture of any of the individual cases, please feel free to contact me.

As always, we are available at any time to discuss any of these lawsuits with each individual Board Member by telephone or by conference, if there are any questions.

Respectfully submitted,

CURTIS L. SHENKMAN

CURTIS L. SHENKMAN

Attachments

OTHER LITIGATION

IN THE CIRCUIT COURT OF THE FIFTEENTH JUDICIAL CIRCUIT, IN AND FOR PALM BEACH COUNTY, FLORIDA
CASE NO. 50-2019 CA 014447 XXXX MB AB

FRED BEMAN, Plaintiff,
vs.
LOXAHATCHEE RIVER DISTRICT, Defendant.

December 6, 2017. Auto Accident involving District vehicle and vehicle driven by Fred Beman.
April 15, 2020. Summons & Complaint served upon the District.
April 20, 2020. Attorney Lyman Reynolds, appointed be District's Insurance Carrier to Defend the District under the District's Insurance Policy.
May 4, 2020. District's Motion to Dismiss filed.
July 8, 2020. District's attorney reports Motion to Dismiss not yet set for a hearing.
August 19, 2020. Agreed Order permitting transfer of the case to Martin County
Sept 16, 2020. Amended Complaint filed in Martin County
As of February 5, 2021, No Summons yet served on the District.

Pre-Suit Notice of Claim under FS 768.28 (6)(a)
Dated August 3, 2020 from Attorney for Plaintiff

Donovan Mackey and Dee Mackey, Plaintiff
Vs.
LOXAHATCHEE RIVER DISTRICT, Defendant.

On or about October 2019 sewage back up into 141 Beacon Lane, Jupiter, FL 33469 (Jupiter Inlet Colony). Plaintiffs claim personal injury from the sewage back up.
August 3, 2020, District notified District's insurance carrier of the claim.
August 18, 2020, Insurance Adjuster for the District assigned the claim.
Plaintiff cannot file suit until claim is denied. 768.28 (6)(b).

LIEN FORECLOSURES

NONE

MORTGAGE OR LIEN FORECLOSURES / LRD COUNTERCLAIMS/CROSSCLAIMS

NONE

BAXTER & WOODMAN
Consulting Engineers
Making a positive difference through innovative engineering solutions.

Loxahatchee River Environmental Control District
Monthly Status Report
February 5, 2021

Submitted To: Kris Dean, P.E, Deputy Executive Director/Director of Engineering

The following is a summary of work performed by Baxter and Woodman, Inc. (B&W), on District projects for the monthly period ending February 5, 2021.

Alternate A1A 16-Inch Force Main Extension

The following items were ongoing or completed during the last monthly period:

- Contractor has completed all physical punchlist items. Final certification pending completion of remaining close-out paperwork, releases, etc. and payment of the repair bill issued by the District.

Olympus Drive Force Main and Low Pressure Sewer Replacement

The following items were ongoing or completed during the last monthly period:

- Contract award was approved at the January 2021 Board Meeting.
- B&W sent correspondence to the District on January 26, 2021 regarding the District's anticipated schedule to issue NTP / move forward with construction of the project. District to provide anticipated schedule to B&W.
- B&W received finalized contract between the Contractor and the District on February 4, 2021 to complete the conformed construction documents.

Alternate A1A 24-Inch Force Main Cleaning & Inspection

The following items were ongoing or completed during the last monthly period:

- B&W completed the assembly of the conformed construction documents.
- B&W conducted a pre-construction / kick-off meeting with the Contractor and the District on January 13, 2021.
- NTP issued to the Contractor on February 1, 2021.

Irrigation Quality 511 (IQ-511) Pump Station Piping Improvements

The following items were ongoing or completed during the last monthly period:

- B&W received confirmation from FDEP on February 4, 2021 that a permit application for a minor revision will need to be submitted. B&W forwarded this response from FDEP to the District and will begin working on the permit application.
- District has advertised the project for bid.
    - Pre-Bid meeting was held on January 5, 2021.
    - Bids were received on January 19, 2021 and opened on January 21, 2021.
    - B&W submitted the bid review letter to the District on February 4, 2021.

- Contract award is pending Board approval at the February 2021 Board Meeting.

Lift Station Fall Protection Improvements

The following items were ongoing or completed during the last monthly period:

- B&W completed the assembly of the conformed construction documents.
- B&W conducted a pre-construction / kick-off meeting with the Contractor and the District on January 27, 2021.
- NTP anticipated to be issued to the Contractor on February 15, 2021.

Respectfully Submitted by:

BAXTER & WOODMAN, INC.

Rebecca Travis, P.E.
Executive Vice President / Florida Division Manager

Engineers...Working Wonders With Water®

2056 Vista Parkway. Suite 400, West Palm Beach, Florida 33411
P. 561.868.6400 F. 561.868.6401

February 3, 2021

Mr. Kris Dean, P.E.
Deputy Director/Director of Engineering
Loxahatchee River Environmental Control District
2500 Jupiter Park Drive
Jupiter, FL 33458

Subject: Monthly Progress Report

Dear Mr. Dean:

Our progress and anticipated work on the odor control study is detailed below.

The following activities were conducted:

1. Sampling locations—sampling points were evaluated and finalized. Samplers are being set up in assigned sampling locations

Next month's activities:

1. Work gathering operational Information will continue
2. Odor sampling—Sampling will be well underway with final round of sampling scheduled to be complete.
3. Air modeling studies will be started

Please let me know if you have any questions.

Sincerely,

CAROLLO ENGINEERS, INC.

Elizabeth Fujikawa, P.E., LEED AP
Vice President

500 S. Australian Ave., Suite 850
West Palm Beach, FL 33401
Office: +1 (561) 746-6900

chen moore and associates

Loxahatchee River Environmental Control District
CMA Project Status Update
2/10/2021

CMA Project/Proposal #	Name	Status
PROPOSALS		
P20.617	BLM House Demolition and Reconstruction	• Pre-scope meeting conducted • Site visit conducted • CMA submitted draft proposal to LRD • CMA provided backup information for overall project budget per LRD request • CMA awaiting LRD comments on proposal
PROJECTS		
None		

Holtz Consulting Engineers, Inc.

HOLTZ CONSULTING ENGINEERS, INC.

270 South Central Boulevard, Suite 207, Jupiter, FL 33458 (561) 575 2005

MEMORANDUM

To: Kris Dean, PE, Deputy Director/Director of Engineering, Loxahatchee River Environmental Control District

From: Christine Miranda, PE, Holtz Consulting Engineers, Inc.

Date: February 5, 2021

Subject: **Loxahatchee River Environmental Control District Monthly Status Report**

The following is a summary of work performed by Holtz Consulting Engineers, Inc. (HCE) on Loxahatchee River District projects through February 5, 2021. **Note: Any information that is historical or repeated from previous months are shown in italics. Otherwise, all information as shown below is newly reported information.**

Lift Station No. 082 Improvements

- A recommendation of award to the lowest responsive and responsible bidder, Hinterland Group, Inc. was presented at the January 2021 board meeting. The Notice of Award of Contract was issued on February 4, 2021. Upon execution of the Contract, a preconstruction meeting will be scheduled. The Owner furnished pumps and equipment, generator and automatic transfer switch have been delivered to the District.

Lift Station #161 and Lift Station #291 Emergency Generator Project

- *HCE has reviewed and returned submittals from the Contractor. Based upon the latest schedule provided by the Contractor, mobilization will occur on February 22, 2021 and construction will be complete by March 23, 2021.*

SE Hobart Street Low Pressure Force Main System

- The Contractor has mobilized, and construction has commenced. The majority of all low-pressure system components have been installed. The tie-in to the existing force main is scheduled for the week of February 8, 2021.

Country Club Drive Force Main Transmission System Preliminary Evaluation

- *District staff will be replacing the pumps at Lift Station #70 and subsequently collecting data for two weeks to provide to HCE. Upon receipt of the updated data, the hydraulic model will be completed. The technical memorandum will be submitted within two weeks after completion of the model.*

Holtz Consulting Engineers, Inc.

Lift Station #163 Emergency Generator Improvements

- The bid opening for the project occurred on January 28, 2021 and three bids were received for the project. A recommendation of award to the lowest responsive and responsible bidder, Hinterland Group, Inc., will be presented at the February board meeting. The Owner furnished generator and automatic transfer switch have been delivered to the District. Upon execution of the Contract, a preconstruction meeting will be scheduled.

Jupiter Inlet Lighthouse Septic to Sewer

- The 90% plans, specifications and cost estimate were submitted to the District on January 20, 2021 and to the Bureau of Land Management (BLM) on January 26, 2021 for review and comment. Comments on the cost estimate were received from the District on January 27, 2021 and comments from BLM on the plans and specifications were received on February 3, 2021. HCE is currently working on addressing the comments from BLM. Final plans and specifications will be submitted within two weeks of receiving comments from the District. The permit applications for the project will be submitted by February 19, 2021.

Lift Station Telemetry Improvements

- A kick-off meeting for the project was held on January 20, 2021. On February 1, 2021, site visits commenced to assess the lift stations. The technical memorandum providing the comparative analysis on the different cellular telemetry systems and the findings of the site visits and associated cost estimates, will be provided to District staff by April 20, 2021.

Rolling Hills Gravity Sewer System, Lift Station, & Force Main

- The project was approved at the January 2021 board meeting. A kick-off meeting is scheduled for February 10, 2021. The 60% design submittal will be submitted to the District by May 5, 2021.

Busch Wildlife Sanctuary

The 1st Quarter Report will be presented at the April 2021 Board Meeting.

J:\Board\Notebook\BWS No Update

Director's Report

- Admin. & Fiscal Report attach. #1
- Engineering Report attach. #2
- Operations Report attach. #3
- Information Services Report attach. #4
- Environmental Education attach. #5
- Safety Report attach. #6
- Other Matters (as needed) attach. #7

J:\Board\Notebook\Directors Report

LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: Governing Board

FROM: Kara Fraraccio, Director of Finance and Administration

DATE: February 12, 2021

SUBJECT: Monthly Financial Report

Cash and Investments

Balances as of January 31, 2021

Certificates of Deposit:

Institution	Original Term	Maturity	Rate	Book Value	Monthly Interest Earned	Market Value
US Bank	2 Years	01/29/21	2.71%	$ 1,011,450	$ 937	$ 1,066,045
Bank United	2 Years	03/11/21	2.60%	1,000,000	2,311	1,050,319
Bank United	9 Months	03/12/21	0.55%	1,565,316	731	1,570,800
Subtotal				$ 3,576,766	$ 3,979	$ 3,687,164
Money Market Accounts:						
Synovus - Public Demand			0.30%		$ 3,604	$ 12,352,344
TD Bank - NOW			0.20%		1,401	8,251,033
Subtotal					$ 5,005	$ 20,603,377
Checking Account:						
SunTrust-Hybrid Business Account			0.50%		$ 5,191	$ 12,746,994
Subtotal					$ 5,191	$ 12,746,994
Total					$ 14,175	$ 37,037,535

Average weighted rate of return on investments is: .49%

As of 1/31/21:
3 month Short Term Bond: .06%
1 month Federal Fund Rate: .25%

Cash position for January 2020 was $34,262,489. Current Cash position is up by $2,775,046.

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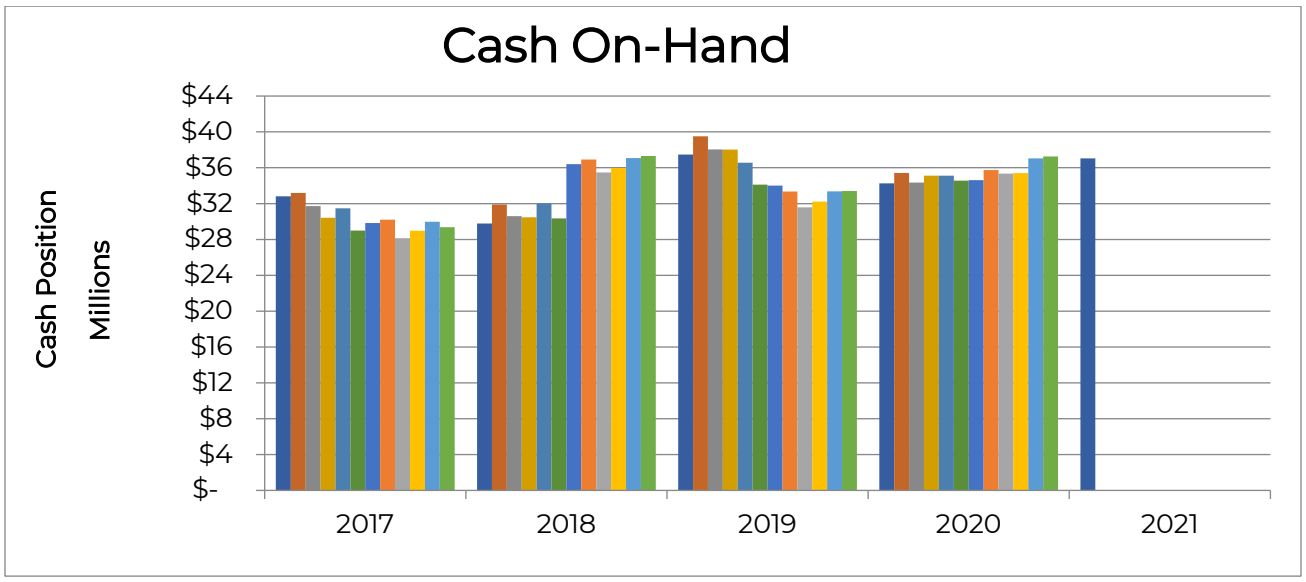
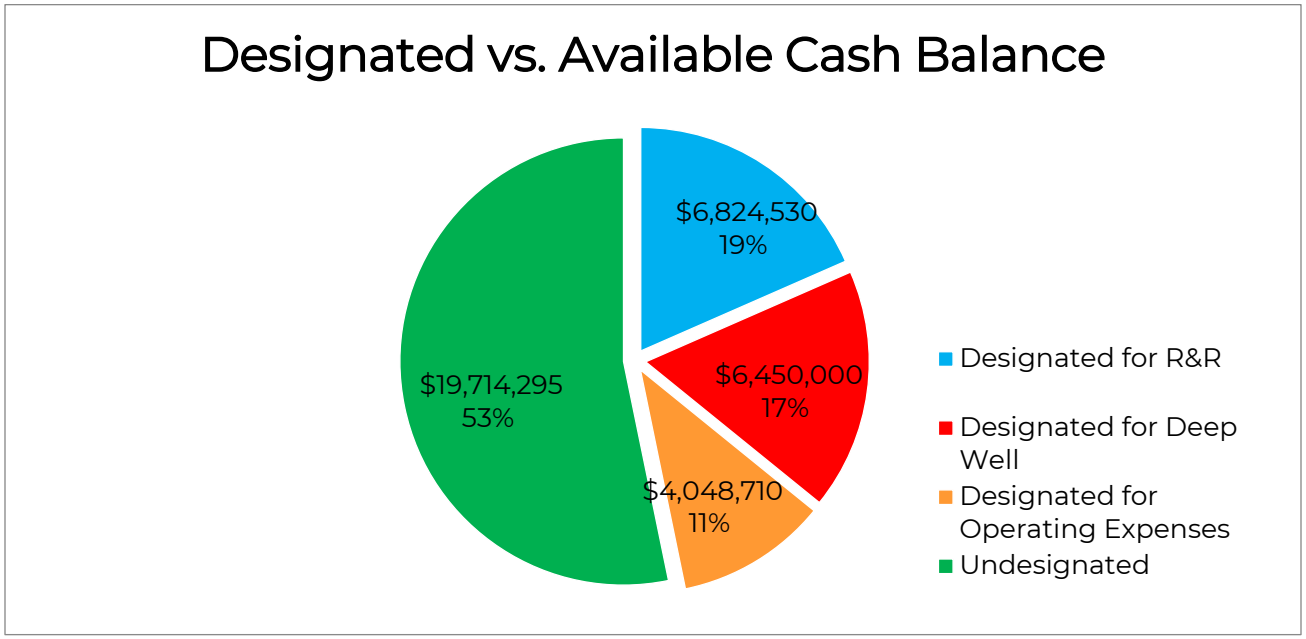




Financial Information

- Legal Fees billed in January totaled $6,625. The fiscal year-to-date total is $19,460.
- There was no Septage billing for the month of January. The fiscal year-to-date total is $165.
- Developer's Agreement – There was one new Developer Agreements in January.
- I.Q. Water Agreements – WorkPlace of Florida is past due from January and Fairways of Jupiter is past due for December and January.
- Estoppel fees collected in January totaled $8,050. The fiscal year-to-date total is $33,700.

Summary of Budget vs. Actual

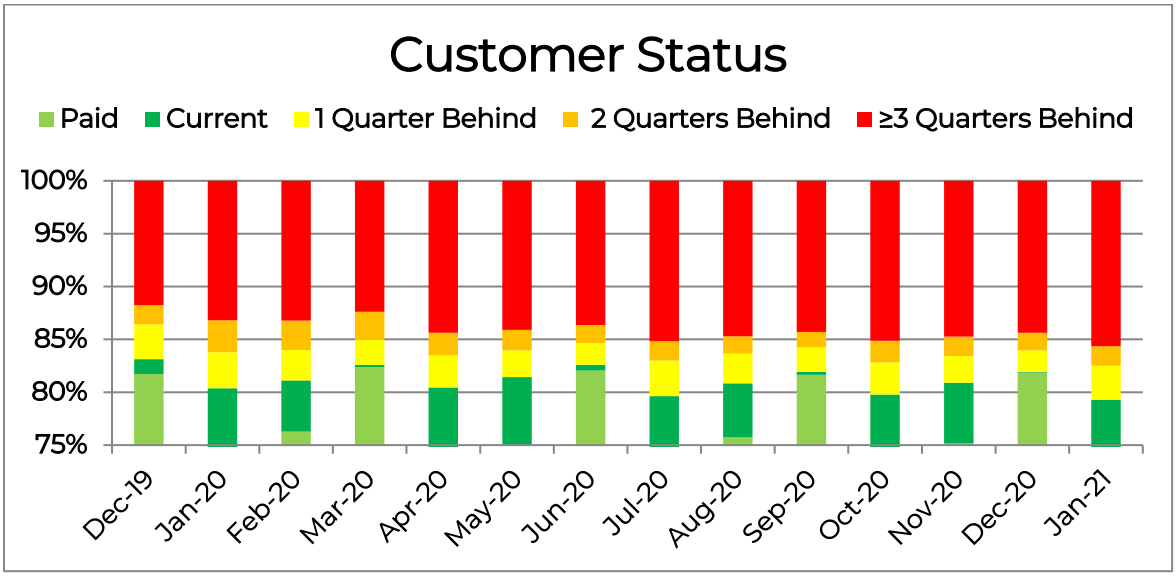
Budget Benchmark *33.00%*	Jan-21 Actual	YTD Actual	FY 21 Budget	Favorable (Unfavorable)	Budget Expended	Jan-20 YTD
Revenues						
Operating Revenues						
Regional Sewer Service	$ 1,388,043	$ 5,579,958	$ 17,670,500	$ (12,090,542)	31.58%	$ 5,651,660
Standby Sewer Service	8,065	32,343	90,000	(57,657)	35.94%	34,794
IQ Water Charges	189,453	759,205	2,250,000	(1,490,795)	33.74%	797,359
Admin. and Engineering Fees	6,848	14,910	73,000	(58,090)	20.42%	34,101
Other Revenue	31,285	112,741	410,000	(297,259)	27.50%	146,152
Subtotal Operating Revenu	1,623,694	6,499,157	20,493,500	(13,994,343)	31.71%	6,664,066
Capital Revenues						
Assessments	193,679	1,050,546	931,500	119,046	112.78%	741,741
Line Charges	33,546	74,386	203,000	(128,614)	36.64%	164,649
Plant Charges	39,350	269,285	932,000	(662,715)	28.89%	143,824
Capital Contributions			800,000	(800,000)	0.00%	89,320
Subtotal Capital Revenues	266,575	1,394,217	2,866,500	(1,472,283)	48.64%	1,139,534
Other Revenues						
Grants						
Interest Income	41,270	569,131	648,000	(78,869)	87.83%	709,678
Subtotal Other Revenues	41,270	569,131	648,000	(78,869)	87.83%	709,678
Total Revenues	$ 1,931,539	$ 8,462,505	$ 24,008,000	$ (15,545,495)	35.25%	$ 8,513,278
Expenses						
Salaries and Wages	$ 404,859	$ 1,729,748	$ 5,960,700	$ 4,230,952	29.02%	$ 1,736,193
Payroll Taxes	28,960	121,464	428,900	307,436	28.32%	129,898
Retirement Contributions	74,714	270,060	889,100	619,040	30.37%	272,562
Employee Health Insurance	100,383	412,818	1,478,400	1,065,582	27.92%	352,849
Workers Compensation Insurance		28,252	86,800	58,548	32.55%	46,864
General Insurance		215,768	386,895	171,127	55.77%	212,898
Supplies and Expenses	47,021	283,116	1,128,000	844,884	25.10%	400,380
Utilities	98,569	402,077	1,399,225	997,148	28.74%	389,350
Chemicals	25,331	104,326	379,000	274,674	27.53%	113,786
Repairs and Maintenance	102,904	622,857	1,948,070	1,325,213	31.97%	655,011
Outside Services	110,468	543,945	1,884,750	1,340,805	28.86%	590,901
Contingency			225,000	225,000	0.00%	
Subtotal Operating Expens	993,209	4,734,431	16,194,840	11,460,409	29.23%	4,900,692
Capital						
Capital Improvements	160,471	2,075,699	10,994,500	8,918,801	18.88%	2,729,893
Subtotal Capital	160,471	2,075,699	10,994,500	8,918,801	18.88%	2,729,893
Total Expenses	$ 1,153,680	$ 6,810,130	$ 27,189,340	$ 20,379,210	25.05%	$ 7,630,585
Excess Revenues Over (Under) Expenses	$ 777,859	$ 1,652,375	$ (3,181,340)	$ 4,833,715		$ 882,693

Pending/Threatened Litigation

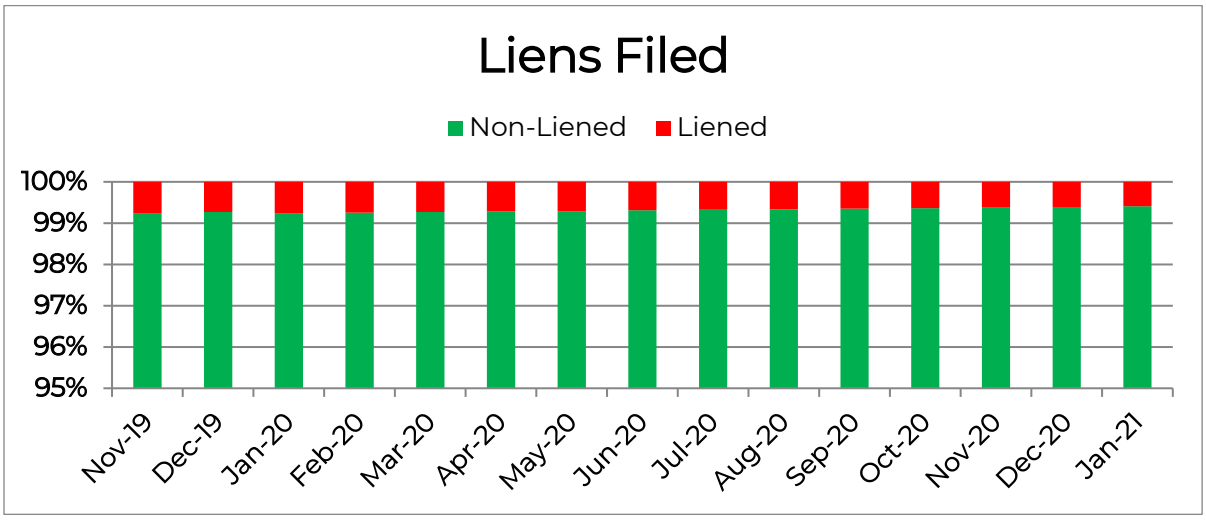
- Vehicle Accident – The District received a legal summons related to a vehicle accident involving a District vehicle. This claim is currently being handled through the District's General Liability Insurance provider, PRIA. PRIA has assigned the firm of Roberts, Reynolds, Bedard & Tuzzio, PLLC to represent the District.
- Beacon Lane – The District received a formal notice that a negligence claim is being made on behalf of a resident on Beacon Lane from injuries sustained as a result of septic and sewage over-flow at the property. We notified the District's legal counsel, the project engineers, the contractor, and the District's General Liability Insurance provider, PRIA.

Accounts Receivable

The chart below illustrates customers' receivable status as a percentage of quarterly sewer billing. Paid or current balances represent approximately 79% billing.



The District serves approximately 33,000 customers. Currently, the District has 195 liens filed which represent approximately 1% of our customers.



LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: D. Albrey Arrington, Ph.D., Executive Director

FROM: Kris Dean, P.E., Deputy Executive Director/ Director of Engineering Services

DATE: February 12, 2021

SUBJECT: Engineering Services Report

Project highlight

Standards Review Committee: This month we implemented the Standards Review Committee. Historically updates to the Manual of Minimum Construction Standards and Technical Specifications were managed solely by the Director of Engineering consisting of an annual review of comments and suggestions followed by necessary revisions. With the implementation of the Standards Review Committee we have standardized the revision process and specifically involved staff participation for the Executive, Engineering, Inspections, Construction, Collections and Plant departments. Committee procedures include proposal, evaluation, review and acceptance (or denial) of proposed revisions and scheduled quarterly meetings.

We anticipate the new Committee will improve employee and departmental engagement with our Standards as well as provide staff with a clear procedure to address deficiencies.

In-house Projects

Lift Station Rehabilitations General Construction Services: Internal scheduling and coordination continue to improve with a focus on moving suspected or known deficiencies from Collections staff to Engineering Inspections for further investigation and Construction for correction. Staff have identified 8 stations for further investigation and scheduled inspections into April to

2500 Jupiter Park Drive
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perform the inspections. Scheduling for inspections is key since it involves a station shutdown, wet well cleaning and confined space entry involving Collections, Inspections and Safety.

181st Street Gravity Sewer System: Staff are coordinating with the contractor for bonds, insurance and executed contracts.

Neighborhood Sewering/Remnant Properties: Staff has designed, permitted and issued purchase orders under our Low Pressure General Construction Services Contract to provide sewer service to 18870/18890 SE Country Club Drive, Thelma Avenue, 18205 Gardiner Lane and 197th Place North. Installation of these systems, excluding Thelma Avenue, are complete and staff are working on record drawings and FDEP/PBCHD certifications.

Including the above and Olympus Drive (included in the Olympus Drive Force Main Replacement project) and 605 + 607 Military Trail (to be completed by in house staff this year) the District will have completed all projects listed under Remnant Areas in the Neighborhood Sewering Schedule in fiscal year 2021.

Fiscal Year 2021 Main and Lateral Lining Projects: Staff plans to begin vetting piggyback options for the lining program in December with the intent that we structure a three-step process for lining. The initial phase will include TV Inspection/Evaluation followed by Cleanout Installation and Point Repairs then Main and Lateral Lining. The set up for this structure will entail significantly more time and work initially but will streamline the overall lining program resulting in increased system evaluation and production over the next two years.

CONSTRUCTION

After last month's re-organization, Construction is working diligently to organize, plan and schedule the backlog of work within the department. In coordination with Collection's new prioritization schedule (shifting from 4 levels of priority to 7), staff will systematically rank work orders based on priorities that clearly define a scheduled completion date, followed by the assignment of work orders to one of 3 categories; work performed under General Construction Services Contracts, work performed by in-house Construction, work requiring a Permit.

While there is significant work to do, we are confident with this planning effort that the backlog will be addressed and the organizational skills developed in doing this will allow Construction to manage future workloads in a timely fashion.

COLLECTIONS AND REUSE

As noted in the Unauthorized Discharges we had 9 instances over the month of January. This is partially driven by improvements and expansion of the preventative maintenance program related to air release valves. As we continue to improve and expand the air release valve program with more effective testing and coverage of the system, we anticipate a continued increase in the number of unauthorized discharges related to air release valves. On the positive side, this

increase in the number of unauthorized discharges is a good indicator that we are catching minor deficiencies before they become large failures resulting in unauthorized discharges such as the 13,000 gallon discharge in reported last month.

UNAUTHORIZED DISCHARGES (fka SANITARY SEWER OVERFLOWS)

There were 9 unauthorized discharges in the collection/ transmission /distribution system in January.

Less than 1 gallon of sewage was spilled on Marcinski Road from a leaking valve packing while opening a valve. Spilled sewage was contained in valve box and disinfected with lime. LRD crews isolated the leak by closing the valve which immediately stopped leak.

5 gallons of sewage escaped from a broken pipe inside a low pressure service box. The failure occurred when the homeowner drove over the service box in his yard. Staff are investigating alternate locations for the service box that would prevent this in the future.

1 gallon of sewage was spilled in Jonathan Dickenson State Park due to a failed air release valve seat. The spill was stopped by isolating the system until repairs could be made.

20 gallons of sewage was spilled from a low pressure pumping unit at a private residence on SE County Line Road in Tequesta FL. The spill was caused by the homeowner not restoring power to the low pressure station after homeowner remodel.

5 gallons of sewage was spilled in Jonathon Dickerson State Park due to a crack in a 2 inch pipe. The spill was stopped by isolating the system until repairs could be made.

Less than 1 gallon of sewage spilled near the intersection of Alt A1A and E. Riverside Drive in Jupiter caused by a leaking air release valve. The spill was stopped by isolating the air release valve until repairs could be made.

500 gallons of sewage was spilled at Light House plaza in Jupiter due to a leak from a grease trap caused by a gravity main blockage. A vacuum truck was used to clear the blockage in the gravity main. 10 gallons of spill reached a storm drain, but due to heavy traffic in area it was not recovered.

100 gallons of sewage spilled on Casseekey Island Road in Jupiter, Fl, caused by a crack in a 1-1/4" pipe. Spilled sewage was absorbed into ground and did not affect storm drains or bodies of water. LRD crews isolated the damaged pipe and made repairs.

10 gallons of sewage was spilled when an air release valve failed to seat properly. Staff isolated the valve until repairs can be made.

D. Albrey Arrington, Ph.D.
EXECUTIVE DIRECTOR

Gordon M. Boggie
CHAIRMAN

Stephen B. Rockoff
BOARD MEMBER

Dr. Matt H. Rostock
BOARD MEMBER

James D. Snyder
BOARD MEMBER

LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: Albrey Arrington, Ph.D., Executive Director

FROM: Jason A. Pugsley, P.E., Operations – Plant Manager

DATE: February 12, 2021

SUBJECT: Operations Department - Monthly Report for January 2021

Treatment Plant Division/ Maintenance Department

Overall, the month of January was productive with all monthly reports prepared and submitted on time. There were no permit exceedances or safety incidents during the month. The treatment plant operated efficiently and met all treatment objectives. Plant flows during the month of January were within the same order of magnitude as the flows recorded during the month of December. The Average Daily Flow (ADF) during January was 7.36 million gallons per day (MGD) vs. 7.34 MGD in December. The Maximum Daily Flow (MDF) during January was 7.77 MGD vs. 7.82 MGD in December. The Peak Hour Flow (PHF) during January was 6,715 gallons per minute (gpm) vs. 6,979 gpm in December. The total rainfall during the month of January was 0.31 inches which was a notable decrease when compared to the month of December when we received a total rainfall of 3.44 inches.

The plant experienced one (1) unauthorized discharge during the month of January. The discharge, which totaled 1-gallon, occurred due to a drip leak which developed on a mechanical joint fitting on the 24-inch ductile iron piping which conveys treated secondary effluent from the injection well pump station to the deep injection well. After discovering the leak, Operations Staff placed a containment pan and sump pump to collect and divert the leaking fluid to an appropriate location. Staff has identified a contractor and is in the process of scheduling the necessary piping repairs. All leaked fluid was contained, the area disinfected with lime and the leak was reported to the appropriate regulatory agencies.

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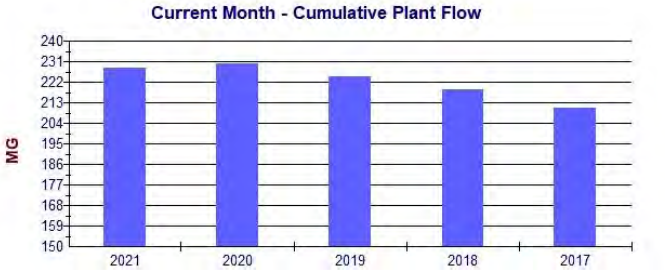
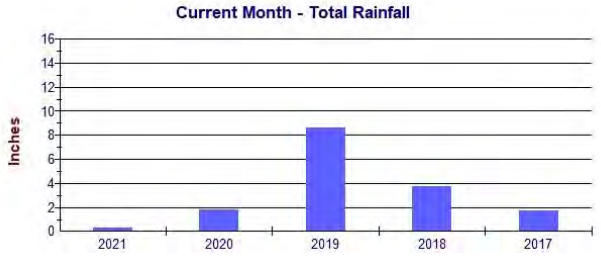
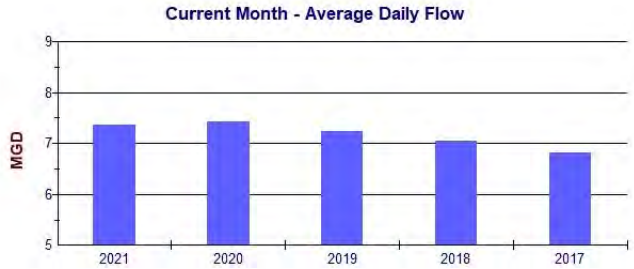
GRAPHICAL SUMMARIES OF PLANT FLOWS AND RAINFALL DATA



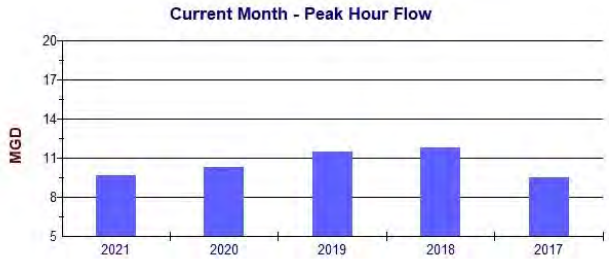
The Cumulative Influent Flow to the plant for the month of January was 228.31 million



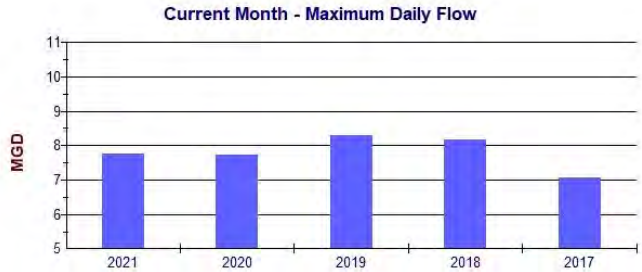
0.31 inches of total rainfall was recorded at the plant site during the month of January.



The Average Daily Flow (ADF) for the month of January was recorded at 7.36 MGD compared to 7.43 MGD one year ago, for the same month.

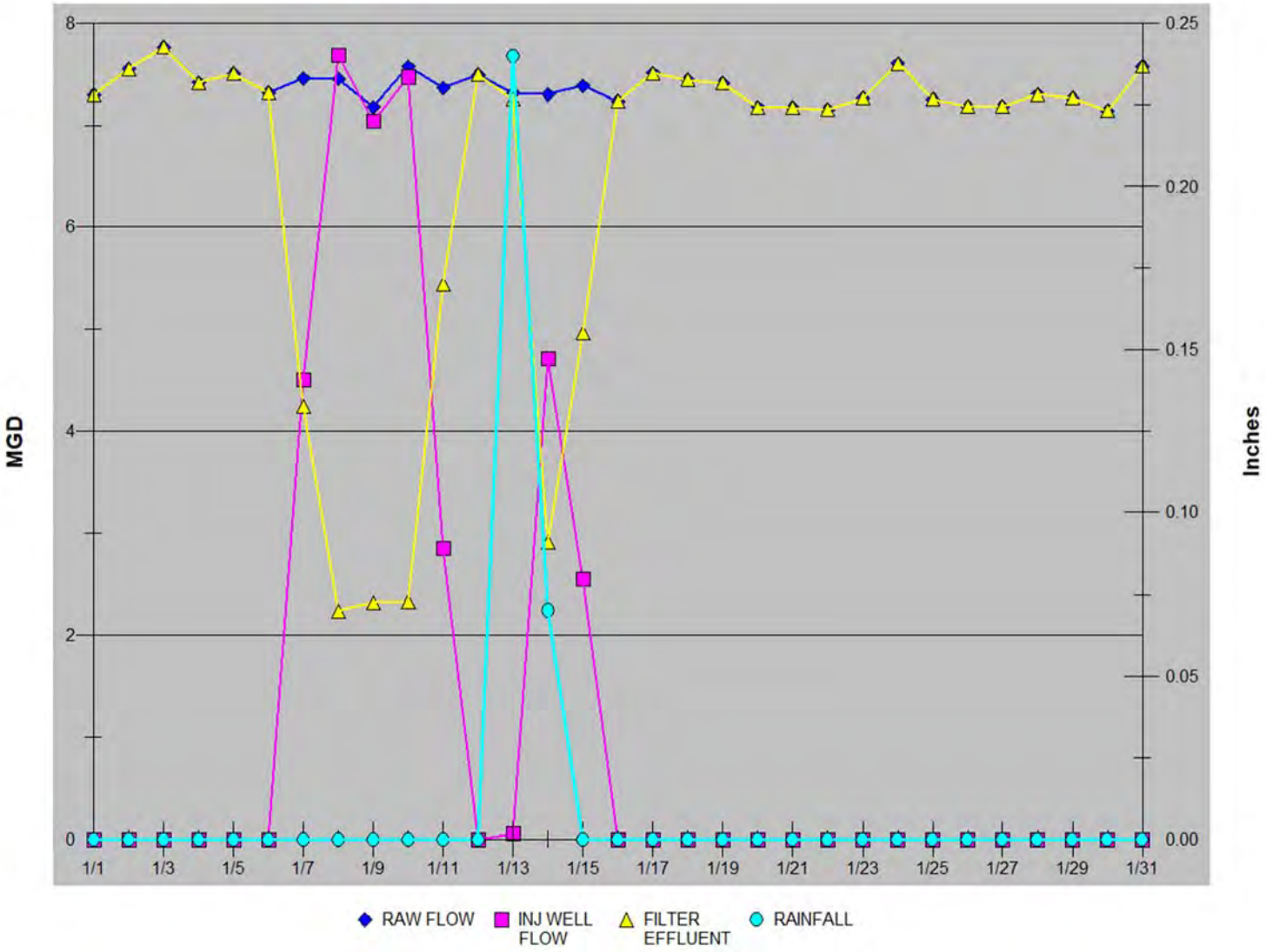


The Peak Hour Flow (PHF) for January was 6,715 GPM which equates to an equivalent daily rate of 9.67 MGD.



The Maximum Daily Flow (MDF) in January was 7.77 MGD.

For the month of January, the cumulative influent flow to the plant was 228.31 MG of which 200.97 MG was sent to the IQ storage system where it was distributed, as needed, to the various golf courses and the Abacoa development sites. A total of 0.31 inches of rainfall was recorded at the site during the month and 36.86 million gallons of blended effluent was diverted to the Deep Injection Well. Overall, 88.03% of the plant influent flows were treated and available for reuse as IQ water. The plant delivered a total of approximately 193.50 million gallons of IQ water to the reuse customers during the month of January.



Year to date (i.e. Calendar Year 2021), approximately 88.03% of all influent flow to the plant was treated and available for reuse as IQ water. The total volume of IQ water distributed to reuse customers for the year stands at 193.50 million gallons.

All monthly reporting was submitted on time.

Treatment Plant:

During the month of January, Operations Staff continued to work diligently to perform routine monitoring, sampling and general maintenance of equipment and structures. Staff also completed and/or supervised Contractor work for special projects during the month including the coordination and completion of the calibration of specific instrumentation which are critical to ensuring continued compliance with the operating requirements and conditions stipulated within the Florida Department of Environmental Protection (FDEP) Operating and Underground Injection Control permits issued for the WWTF.

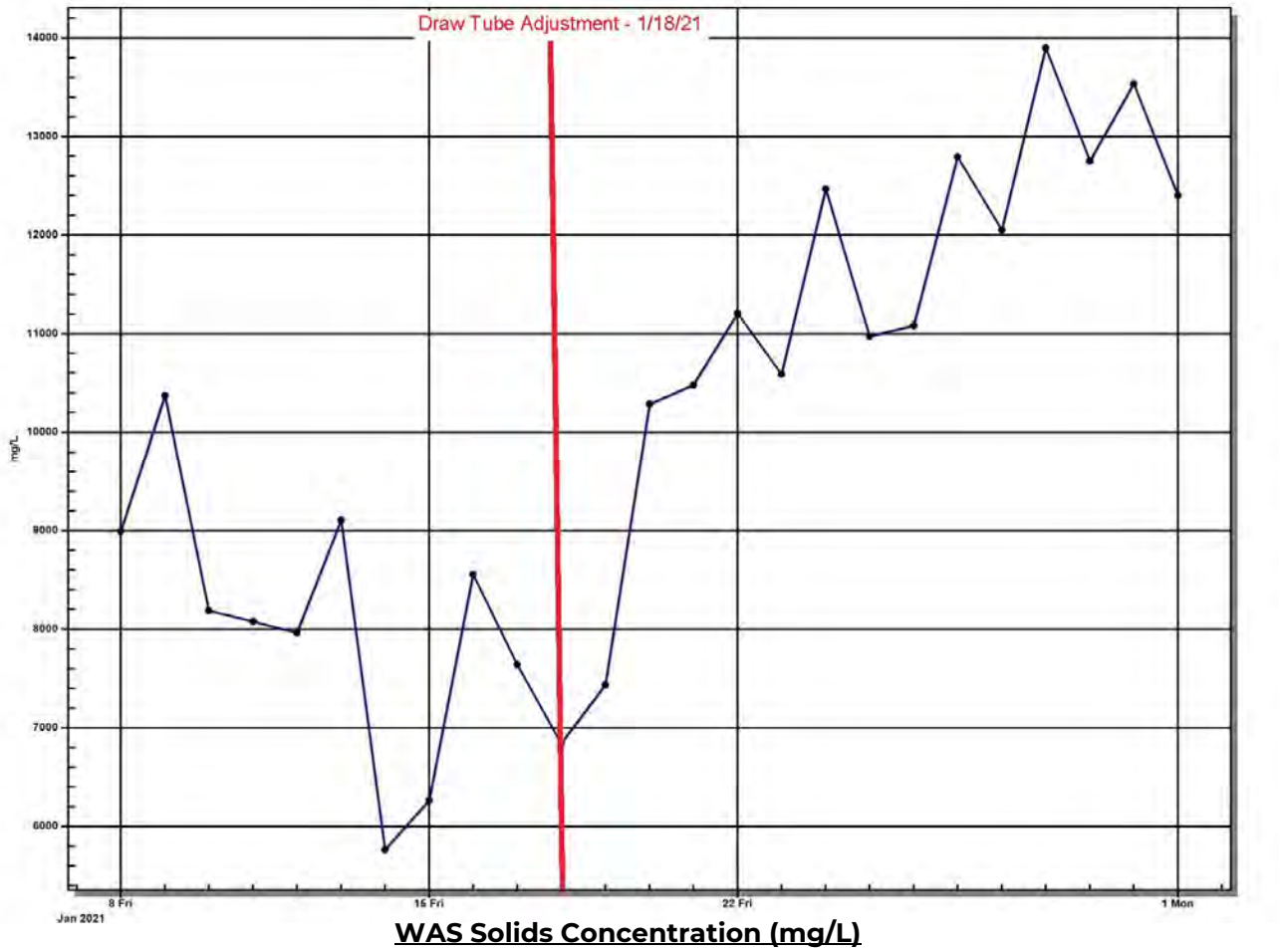
Inline Magnetic Flow Meter – Equalization Return

To maintain reliability and ensure continued safe operation of our chlorine delivery systems, Operations Staff oversaw the annual maintenance of the system by a qualified vendor during the month of January. The work included the inspection and cleaning of the chlorine regulators as well as the replacement of all system vacuum tubing.

Lastly, during the month of January Operations Staff worked to optimize the sludge draw tube settings at each of the secondary clarifier units. The objective of the setting modifications was to enhance sludge return (Return Activated Sludge, RAS) and sludge wasting (Waste Activated Sludge, WAS) processes. To this end, Staff made strategic adjustments to the height and flow rates of the draw tubes at each of the secondary clarifier units. A comparison of the WAS sludge solids concentrations pre- and post-adjustments thus far have been favorable. Prior to the adjustments the solids concentration of the WAS ranged, on average, between 7,500 to 8,500 milligrams per liter (mg/L). Post adjustments the WAS concentration has

ranged, on average, between 11,500 to 12,500 mg/L which corresponds to approximately a 50% increase in the typical WAS solids concentration. This increase is significant because higher WAS concentrations generally result in:

- Decreased WAS pumping time (and associated energy costs) to remove the required volume of solids from the liquid treatment process
- Reduction in the pounds of polymer required to enhance the sludge coagulation process upstream of the belt filter press units
- Sludge dewatering process times are decreased since inlet solids concentrations to the belt filter press units is higher
- Decreased wet tons of sludge volume which is required to be hauled and treated at the SWA biosolids processing facility since final solids concentration of dewatered sludge processed by the belt filter press units is measurably higher.



WAS Solids Concentration (mg/L)

Staff is optimistic about the preliminary findings which the process adjustments have appeared to have yielded. Staff intends to complete a more thorough analysis, including a review of potential operational cost savings, at a later date following longer term successful operation at the current settings.

Maintenance Department:

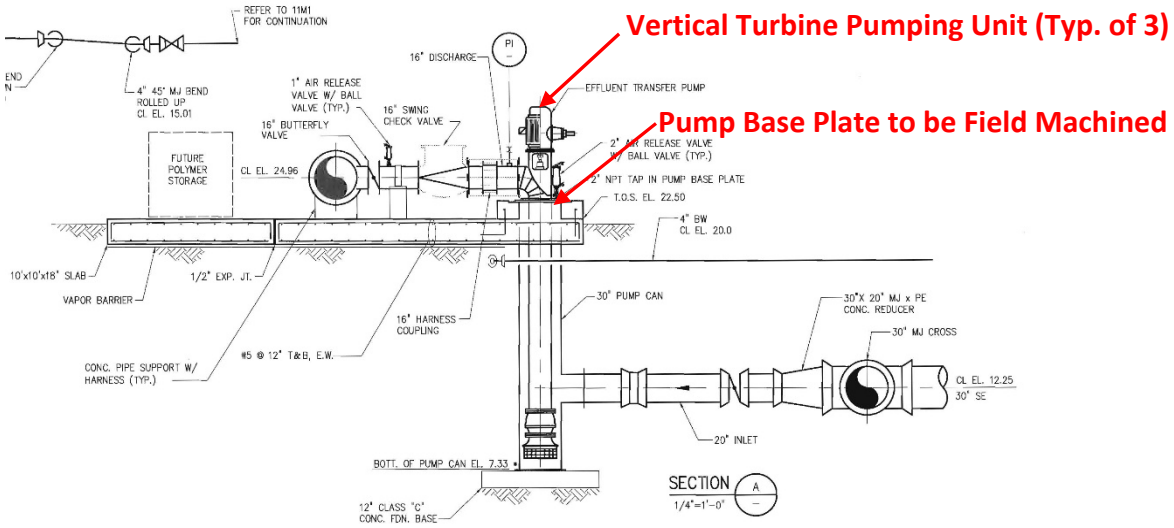
The Maintenance Department continued to efficiently perform planned maintenance (PM) tasks over the last monthly period. In addition to the completion of standard PM tasks the Maintenance Department addressed non-routine maintenance items as well as "special projects". A few examples of these types of projects are presented below.

The Maintenance department lead a team which included District operators and the installing contractor during the decommissioning, removal and installation of new variable frequency drives (VFDs) dedicated to each of the two (2) plant service water pumps.

Plant Process Water Variable Frequency Drives (Typ. of 2)

The replacement VFD's are the latest technology available. As part of the work, specific PLC program updates were also completed to increase system reliability and eliminate antiquated and unnecessary systems including the conversion of the drive system from DeviceNet to hard wired systems.

Maintenance Staff also began evaluating and developing the scope of work to address an ongoing issue with the current pump set configuration at Filter Pump Station No. 2 (FPS No. 2). As part of previous modifications, the vertical turbine pumps were shimmed level to address operational concerns related to pump cavitation. The pumps were shimmed to ensure plumbness along the length of the pump shaft. Unfortunately, the modifications resulted in unintended consequences including operational limitations in the operating liquid level at Filter Pump Station No. 1 (which is hydraulically connected to FPS No. 2) and a seal break which creates a potential location for an unauthorized discharge to occur. As part of the work performed by the Maintenance Team, FPS No. 2 was valved-off and isolated and one of the three vertical turbine pumps was removed to allow Staff and a vendor to review what needs to be completed to properly rectify the pump set concerns. In the end, it was determined that the existing pump base plates should be field machined, in-place, to level. Staff secured proposals from three qualified vendors and is in the process of scheduling the rehabilitative work.



Filter Pump Station No. 2 – Section View

Removal of FPS No. 2 – Pump No. 1

Filter Pump Station No. 2 – Existing Pump Set Layout

LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: Albrey Arrington, Ph.D., Executive Director
FROM: Bud Howard, Director of Information Services
DATE: February 11, 2021
SUBJECT: Information Services Monthly Governing Board Update for January 2021

WildPine Ecological Laboratory

WINNER! DEP Innovative Technologies Water Quality Improvement Grant

The Loxahatchee River District has been selected by DEP for the Nano Bubble Ozone Technology (NBOT) water quality improvement project in Jones Creek for the full grant request of $350,000. Recall the Board approved our submittal of this grant application last summer. This will be an exciting research and demonstration project for a method to potentially treat storm water issues, and improve the water quality in Jones Creek using microbubbles of ozone. We have begun developing contract documents that we will bring to Board for approval in March or April.

Riverkeeper Project

In January, lab staff and our partners collected water quality samples from 27 monitoring stations throughout the watershed. The overall water quality score for January 2021 was "Good" at 84%, similar to last month's score of 87%, and an improvement from January 2020 at 73% (score card on next page). We collected a total of 66 bacteria samples in support of several projects, including the weekly bacteria monitoring program and our partnership project with Town of Jupiter working in Jones/Sims Creeks.

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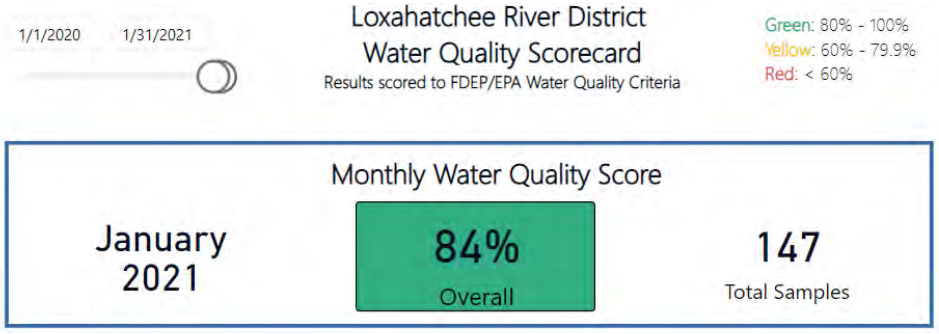
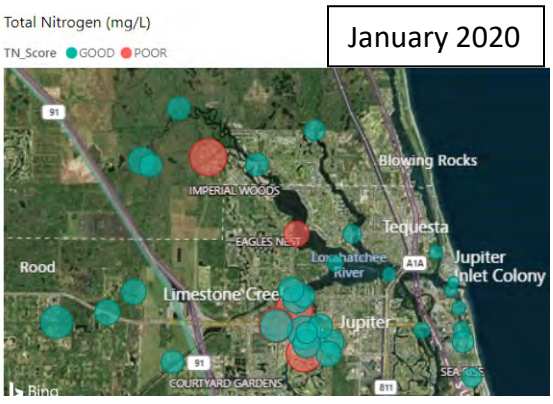
The proportion of both Nitrogen and Phosphorus scored “Good” in January. Because the scores were slightly worse than December, the higher nutrients may have contributed to higher Chlorophyll concentrations and percent “good” score of 78%. For the combined fecal indicator bacteria (fecal coliforms in all waters, enterococci in marine and brackish waters and E. coli in fresh waters), 55 out of 66 (83%) samples scored “Good” when compared to DEP’s Surface Water Quality Standards, marginally better than the same period last year (January 2020) when 77% of the samples scored “good”.

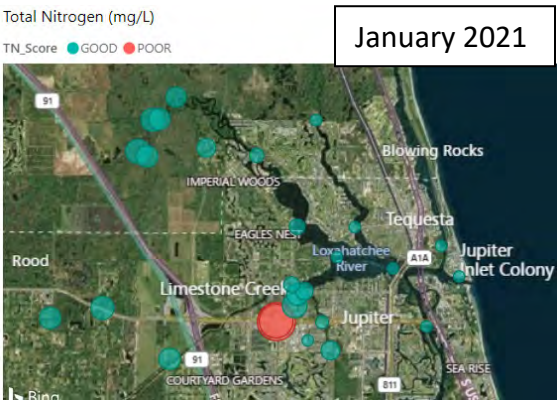


TN: Total Nitrogen, TP: Total Phosphorus, CLA: Chlorophyll a, BAC: Enterococci and E. coli bacteria

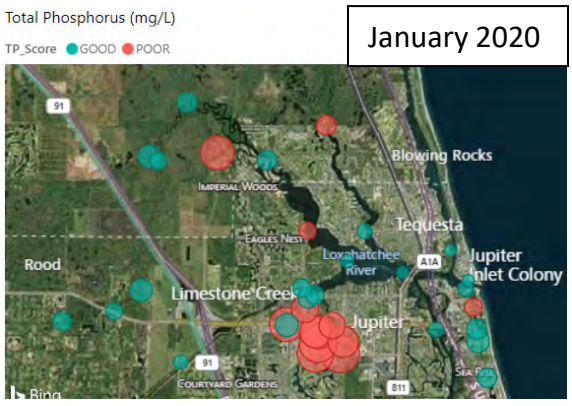
Year	Month	# Samples	Overall Score	# TN Samples	Total Nitrogen Percent Good	# TP Samples	Total Phosphorus Percent Good	# CLA Samples	Chlorophyll Percent Good	# BAC Samples	Bacteria Percent Good
2021	January	147	84%	27	93%	27	85%	27	78%	66	83%
2020	December	128	87%	17	100%	17	100%	17	100%	77	78%
2020	November	157	80%	27	93%	27	78%	27	96%	76	70%
2020	October	149	66%	28	89%	28	46%	28	46%	65	74%
2020	September	134	77%	17	100%	17	88%	17	59%	83	73%
2020	August	147	80%	27	96%	27	85%	27	70%	66	76%
2020	July	152	70%	28	82%	28	57%	28	46%	68	81%
2020	June	122	71%	16	88%	16	69%	16	63%	74	70%
2020	May	136	72%	22	95%	22	86%	22	55%	70	66%
2020	April	150	82%	25	100%	25	80%	25	48%	75	88%
2020	March	109	87%	15	100%	15	100%	15	60%	64	88%
2020	February	148	89%	25	96%	25	100%	25	68%	73	89%
2020	January	239	73%	47	89%	47	55%	47	70%	98	77%
Total		**1918**	**78%**	**321**	**93%**	**321**	**76%**	**321**	**66%**	**955**	**78%**

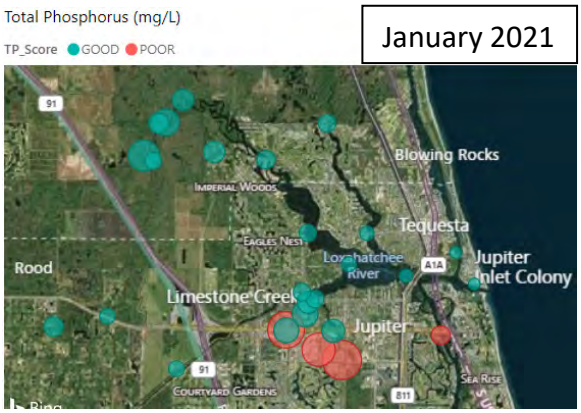
Loxahatchee River Water Quality Scorecard for Overall, Total Nitrogen (TN), Phosphorus (TP), Chlorophyll a (CLA) and E. coli and enterococci bacteria (BAC) parameters.



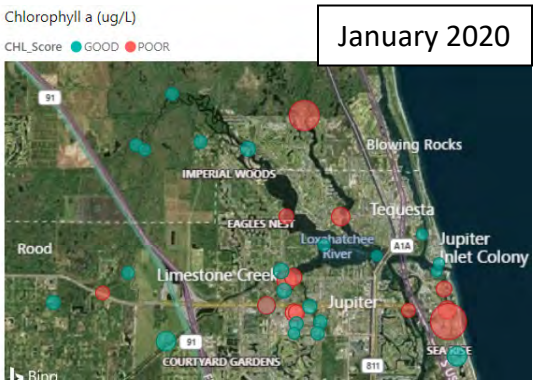


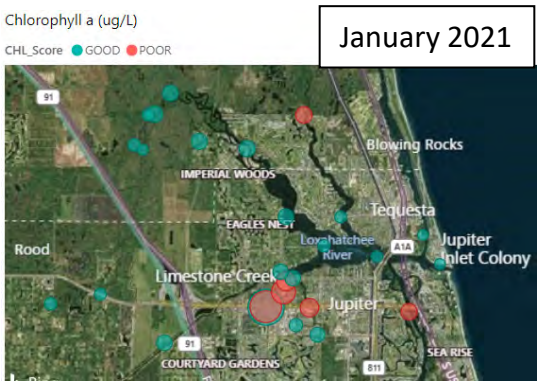
Total Nitrogen (TN) went from a score of 85% (40 Good out of 47) in 2020 to 93% (25 Good out of 27) in 2021. When evaluating the water quality results spatially, we can see the disparity in sampling locations and counts, particularly in 2020 in the Jones and Dubois watersheds that were part of our special monitoring project with FDEP. This year, station 74 located in Sims Canal near Walgreens on Indiantown Road had a TN of 2.0 mg/L, well over the NNC of 1.54 mg/L for freshwater at that site. We haven't seen TN that high since 2016 at this site. Just downstream, at 74DW in Sims Creek (red dot covered up on map), the TN was 1.7 mg/L.





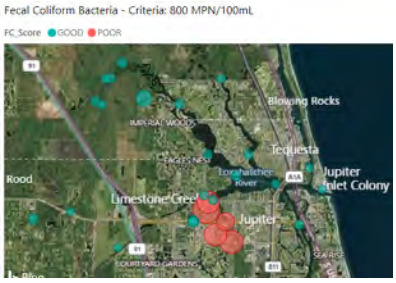
Total Phosphorus (TP) scores improved from last January, but again, there was a disparity in sampling locations and counts. TP went from a score of 55% (26 Good out of 47) in 2020 to 85% (23 Good out of 27) in 2021. The increase in sample count for January 2020 was due to additional sampling in Jones and Dubois watersheds for our project with FDEP. This year, Station TPJ located in Jones Creek at the footbridge, had the highest TP of 0.114 mg/L this month, over the NNC of 0.075 mg/L for that site.

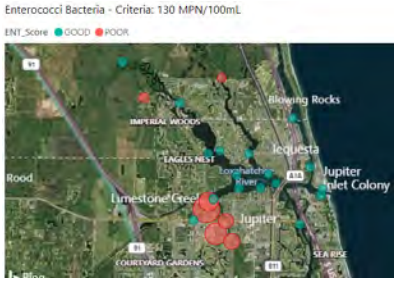


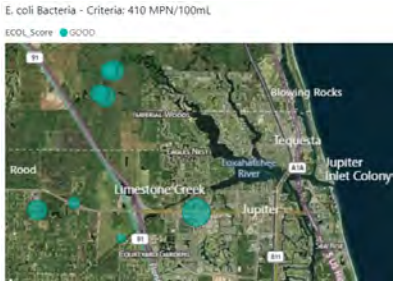


Chlorophyll (CLA) went from a score of 70% (33 Good out of 47) in 2020 to 78% (21 Good out of 27) in 2021. The highest CLA values were found in Sims Creek

at the same sites that had high nitrogen (TN). Station 74, the canal that flows into Sims Creek, had a relatively high CLA of 17 ug/L this month, but still scored "good" for that segment. However, just downstream at 74DW in Sims Creek, the CLA was 14 ug/L, which is "poor" for brackish tributaries with the NNC of 5.5 ug/L.



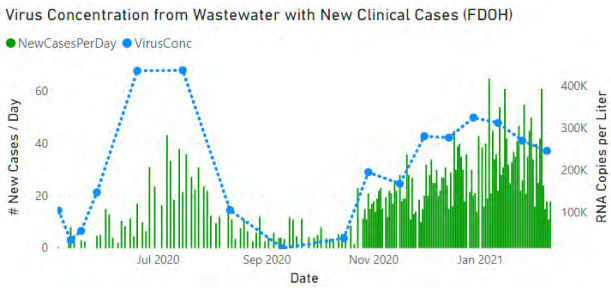


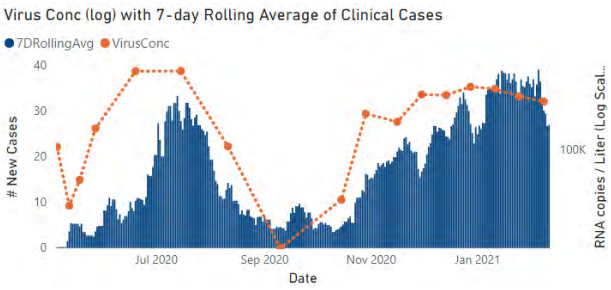


January 2021 fecal coliform bacteria in all waters, enterococci in marine and brackish waters and E. coli in fresh waters, results had 55 out of 66 (83%) samples scored "Good" when compared to DEP's Surface Water Quality Standards, an improvement over last month (with 78% Good) and last January 2020 (with 77% Good). The "Poor" stations were concentrated, like the other parameters, in Jones and Sims Creeks. Five out of seven stations sampled in the creeks had poor fecal coliform results between 882 and 1,720 and poor enterococci results between 845 and 2,187 MPN/100 mLs of water. The freshwater stations of the river sampled this month as shown on the E. coli map were all good (below 410 MPN/100 mL) this month.

Wastewater Surveillance of COVID-19

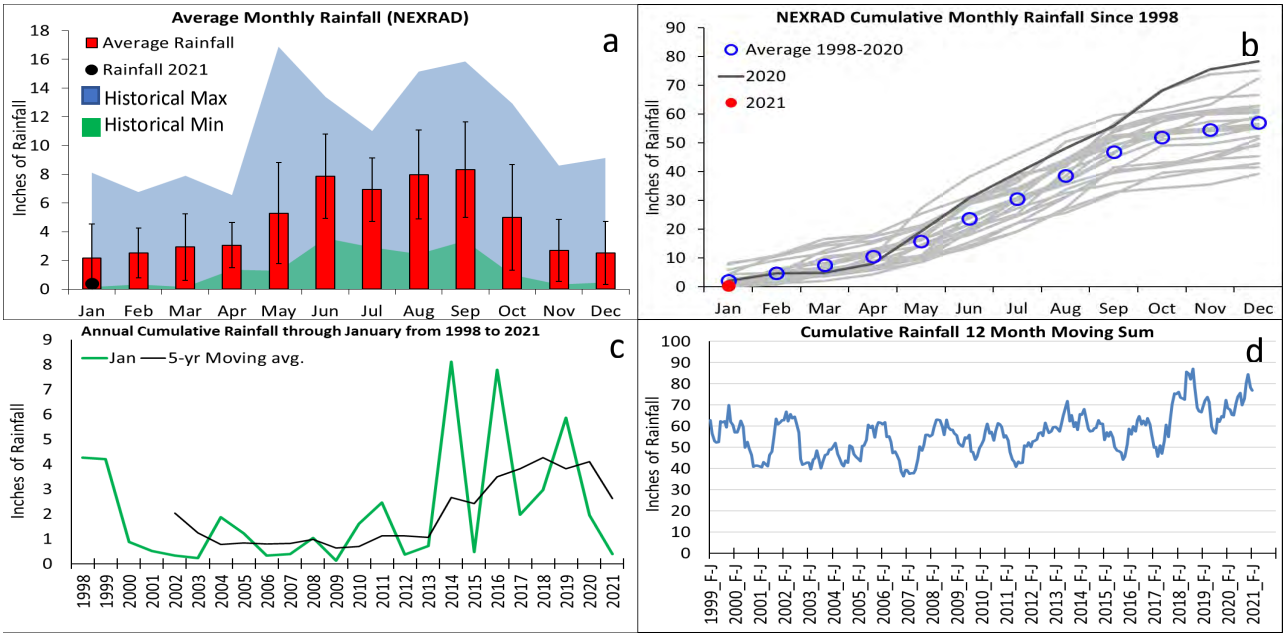
The wastewater surveillance work testing for SARS/Covid-19 in our wastewater is showing some interesting trends. Our January 25 sample indicated high virus concentration with a flat, or perhaps a slightly declining, trend. The trends with the wastewater again preceded the similar observations in the 7-day rolling average of clinical cases for the zip code in our area. The wastewater sample from Monday, February 8 indicates another slight decline in virus concentration, so 25 to 30 daily clinical case counts will likely continue in our area for the next one to two weeks.



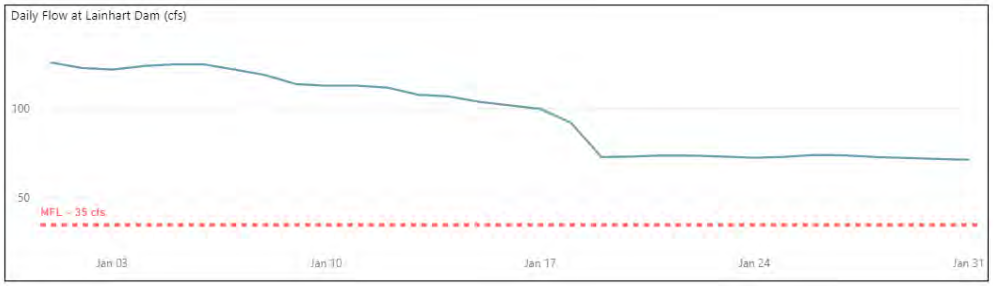


Hydrologic Monitoring

2021 is off to a dry start. Rainfall in January totalled just 0.4", well below the 2.2" historical average for the month (Graph 'a' in figure below) and is the lowest January total since 2012, which also had 0.4". Decreased rainfall has led to declining river flows into the estuary. At Lainhart Dam, flow has had a general decrease throughout January from 126 cfs at the beginning of the month to 71 cfs at months end, with an overall average of 97 cfs (see River Flow figure below). As the river flows in the Northwest Fork decreased, there was a slight increase of salinity detected at the River Mile 9.1 USGS structure. Starting January 21 average daily salinity started to increase before reaching a peak of 2 ppt two days later. There was been no measurable flow detected at the S-46 control structure into the Southwest Fork in January.



Figures above display various measures of rainfall. Panel (a) shows average monthly rainfall from 1998 to 2020 (red bars; error bars indicate ± 1 sd). Black dots indicate monthly rainfall for 2021. The blue and green shaded areas show the maximum and minimum rainfall ever recorded for each month. Panel (b) shows monthly cumulative rainfall for each year since 1998. Red circle indicates rainfall during January 2021; dark gray line indicates rainfall during 2020. Blue circles are monthly cumulative average rainfall measured between 1998-2020. Panel (c) shows cumulative annual rainfall using NEXRAD radar-based data. Green line indicates cumulative rainfall through December for each year since 1998, when the radar-based rainfall measurements began. Black line is the 5-year moving average across all years. Panel (d) shows cumulative 12-month moving total of monthly rainfall. The "F-J" notation means February through the following January.



River flows measured at Lainhart Dam for January 2021.

Oyster Spawning and Settlement Monitoring

Oyster settlement monitoring for 29-day period ending January 8 continues to show minimal spawning activity in both forks of the river. Settlement in the Northwest Fork occurred exclusively at the downstream site with a spat density 166 spat m^2. Average spat density in the Southwest Fork was 111 spat m^2. Interestingly, 80% (177 spat m^2) was observed at the upstream site.

This month we added to the District's website the report titled Oyster Restoration Reef Assessment 2019 (Oyster Restoration Reef Assessment 2019). This report presents the results of the monitoring assessment conducted in 2019 on the NOAA restoration reefs which were constructed during the summer of 2010. In brief, nine years following construction, the two large reefs continue to be healthy and productive and compare favorably to nearby natural oyster reefs.

Volunteer Water Quality Monitoring Program

The Volunteer Water Quality grade for January was again an "A". The dry conditions last month reduced storm water flows and helped to hold the water quality grades in the "Good" range. At Station 30, the pH drifted above the optimal range during the second half of the month due to the increasingly dry conditions. This degraded the pH grade at that station from "Good" to "Fair".

January-21	Averaged results for the Month							Monthly Cumulative Scores						Cumul. Monthly	
Site	Temp (F)	Secchi	Salinity	pH	DO	DO%	Color	Vis	Salt	pH	DO	DO%	Color	Score	Grade
LR10V	71.2	2.6	34.4	8.2	6.9	96.3	1.0	B	A	A	A	A	A	96.7	A
LR22V	67.1	VAB	40.3	8.1	6.8	94.4	1.0	VAB	A	A	A	A	A	100.0	A
LR30V	69.4	1.4	33.0	8.2	6.1	82.7	1.0	A	A	C	A	A	A	91.7	A
Average	69.2													95.3	A

Summary of results from the Volunteer Water Quality Monitoring Program.

Customer Service

Payment Processing

In January the Customer Service Team was impacted for two weeks by illness and Covid quarantines that reduced our staff from four to one. A BIG SHOUTOUT goes to the unflappable Cindy Denton who singlehandedly kept the Customer Service shop running smoothly during this unprecedented time – thank you Cindy!

Because of our staff shortage, we postponed Q1 billing until January 21 so we received and processed over 60% fewer payments than usual for the first month of the quarter. Delayed billing makes an increased workload the second month of the quarter, but previous, similar, delays have resulted in typical numbers of customers satisfying their accounts by the due date, and certainly by the end of the quarter. Given the economic situation we will continue to closely monitor payment patterns.

Information Technology (IT)

IT Help Desk Position

We are excited to have Josmar Nunez join the IT Team as our Help Desk Support Technician. Josmar joined the District in 2017 where he worked in Operations as a Plant Operator during the night shift. In his new position, Josmar will be on the front lines of the IT shop handling user requests, desktop maintenance, software updates, and more. Welcome to the team, Josmar!

CMMS (Computerized Maintenance Management System) Training

During December and January, IT facilitated online training sessions on advanced topics related to our CMMS platform, Infor EAM. The primary motivation for this training was to begin launching improvements to various areas of the system such as work order priority, asset life cycle, and safety protocol management. In the coming months, we will begin implementing changes that have been identified as areas for improvement. Stay tuned!

Loxahatchee River Environmental Center
February 2021

River Center Summary Statistics

LRD'S ENVIRONMENTAL STEWARDSHIP DASHBOARD

		Environmental Stewardship Impact [%ES Impact = (Total Visitors x ES Index)/Monthly Target]	Environmental Stewardship Index	Total Visitors (incl. Visitors, Field Trips, Onsite Programs)	Average Program Participation [Actual participants/Capacity of Program]	Volunteer Engagement	1st Time Visitors	Visitor Satisfaction	Staff Overall Program Assessment	Expenses	Program Revenue
Benchmark / Customer Expectation		% of Target	Monthly Average [Max Rating is 9]	% of Target	% of Capacity	% of Target	% of Target	Rating Average [Max Rating is 5]	Rating Average [Max Rating is 5]	% within budget	% of Target
Blue Level		≥ 110%	≥8	≥ 110%	≥ 95%						
Green Level		≥ 90%	≥7	≥ 90%	≥ 75%	≥ 90%	≥ 90%	≥4	≥4	≥ 85% but ≤ 105%	≥ 90%
Yellow		≥ 75%	≥5	≥ 75%	≥ 50%	≥ 75%	≥ 75%	≥3	≥3	≥ 80%	≥ 75%
Red		<75%	<5	<75%	<50%	<75%	<75%	<3	<3	< 80% or > 105%	<75%
2018 Baseline		130%	7.3	84%	84%	99%	124%	4.8	7.3	90%	165%
2019 Baseline		134%	7.3	76%	96%	107%	176%	4.7	7.8	96%	100%
2020 Baseline		60%	7.6	28%	47%	56%	65%	4.6	7.8	83%	87%
2020	Jan	128%	7.4	77%	76%	105%	78%	4.8	8.5	105%	185%
	Feb	117%	7.4	93%	89%	98%	179%	4.8	8.0	87%	201%
	Mar	69%	7.7	28%	30%	24%	68%	5.0	8.1	86%	135%
	Apr	0%	0.0	0%	0%	21%	0%	0.0	8.1	83%	112%
	May	0%	0.0	0%	0%	17%	0%	0.0	6.9	85%	67%
	June	0%	0.0	0%	0%	7%	0%	0.0	0.0	87%	25%
	July	0%	0.0	0%	0%	6%	0%	0.0	0.0	92%	23%
	Aug	0%	0.0	0%	0%	10%	0%	0.0	0.0	87%	19%
	Sept	42%	7.7	8%	55%	27%	0%	3.8	8.5	72%	19%
	Oct	26%	8.3	18%	55%	70%	13%	4.9	7.8	62%	76%
	Nov	76%	7.3	48%	63%	62%	75%	4.5	7.2	71%	104%
	Dec	87%	8.0	44%	85%	84%	105%	4.0	8.0	74%	81%
2021	Jan	106%	8.1	55%	77%	80%	92%	4.6	7.9	88%	92%
Consecutive Months at Green		1	5	0	2	0	2	4	5	1	1
Metric Owner		O'Neill	O'Neill	O'Neill	Harris / Duggan	O'Neill	O'Neill	O'Neill	O'Neill	O'Neill	O'Neill

Metric	Explanation
Visitors	The number of visitors each month continues to climb, but we are still not where we want to be for visitation at this time. The River Center plans to make Saturdays available for visitation in February. The Atala Butterfly Festival did help with the increase in number of visitors and Environmental Stewardship Impact.
Volunteers	There are still limited number of spots available for volunteers and not all volunteers are ready to return to the River Center yet. We do consistently have animal care volunteers and we now have a couple of visitor services volunteers that are back.

River Center General

On January 23rd we had four volunteers and three staff members participate in a Saturday garden cleanup project. The goal was to get the River Center's garden ship shape for the Atala Butterfly Festival on January 30th. We mulched, weeded, trimmed, and clean up garbage. Everyone got their hands dirty and worked incredibly hard. Special thank you goes to Caleb, Rohan, Nick, and Mason for spending the morning volunteering their time, energy, and work ethic to help the River Center.

Special Programs

Blooming in the Garden – Animal Lifecycles [Saturday, January 9th]

On Saturday, Jan. 9th the River Center hosted our Blooming in the Garden early learner program. This month's theme was about animal lifecycles and included the classic story "The Very Hungry Caterpillar," a lesson on different types of lifecycles, and a fun craft. Families then wandered around and explored in the garden. They found monarch caterpillars, snails, lady bugs, and colorful flowers and berries. Every family took home their own planter pots with various herbs and wildflowers for their home gardens. It was a beautiful day to be outside and we can't wait until our next one.

Archery Instructor Training [Saturday, January 16th]

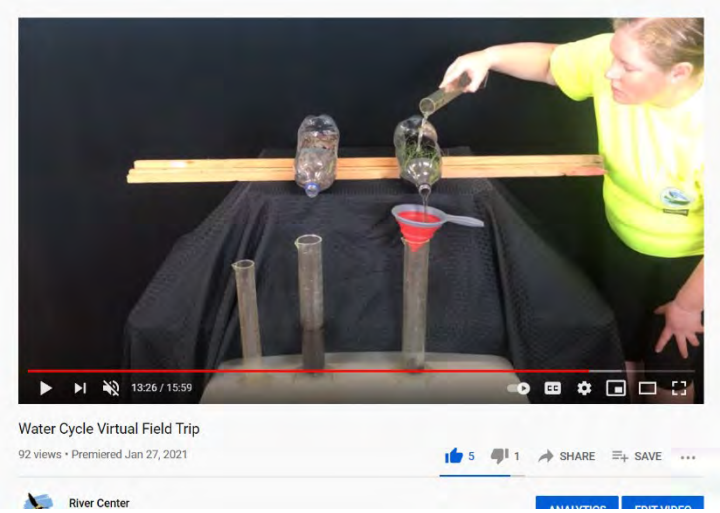
Megan and Sara took an archery instructor training course to renew their Level 1 certifications. This training occurred at the Everglades Youth Camp in partnership with FYCCN and was taught by Beau Yeiser. This was a full day of training that included safety demonstrations, course setup, program development and of course, target practice! This was a wonderful refresher course and has inspired Megan and Sara to redesign and schedule new archery programs for the River Center this coming year.

Nature Walk at Pal Mar (Hungryland) Natural Area [Wednesday, January 20th]

The River Center did a Nature hike at the South Florida Water Management District's (SFWMD) Pal Mar, Hungry-land natural area. Visitors hiked with two River Center staff members along the trails learning the various habitats of the land and identification of the organisms found there. Along the hike visitors saw various native plants such as Sneezeweed, Sundew, Florida Slash Pine, Tickseed, Duck Potato, and Pickerel Weed, along with other organisms like mushrooms and lichens. Visitors saw wildlife including the Yellow Sulfur Butterflies, Red-Bellied Woodpecker, White Egret and Coyote and Racoon tracks/scat. *The Loxahatchee River District partners with SFWMD and other agencies to help manage stormwater in our community. Stormwater contains pollutants which can damage delicate ecosystems. By responsibly managing stormwater we can keep our natural areas pristine. These wetlands also store water during the wet season as well as recharge our aquifers with freshwater as water*

percolates through the soil. This is an important function of these natural areas. When development occurs and we lay down impervious surfaces such as concrete and asphalt, the water cannot be contained or percolate, so it must "run-off" into waterways, picking up pollutants along the way.

Virtual Field Trips – Water Quality [Wednesday, January 27th]



The River Center presented its ninth virtual field trip of the school year. This program's theme was the water cycle. This fieldtrip introduced students to the various steps of the water cycle and helped them make connections between the water cycle and all livings things. It covered vocabulary such as evaporation, condensation, precipitation, percolation, and runoff. *The field trip included a demonstration of the water cycle and how erosion effects groundwater and surface water quality through soil runoff.* Educators also did a demonstration where they represented a water molecule to explain the infinite paths water might take throughout the water cycle. As a water molecule, educators traveled through a cloud, a glacier, the ocean, groundwater, a stream, a plant, and different animals including a human.

Check out the River Center's Full Playlist of Virtual Field Trips here: Virtual Field Trips

Science with Sam

In January, Science with Sam taught a class on pollinators. Students learned what pollinators are and why they are important in an ecosystem. Students discovered that pollinators assist with the production of the produce we eat, and without pollinators we would have significantly less food. Students created their own butterfly life cycle carousel to understand the different life stages of insect pollinators and played a 'pollination game' simulating pollinators visiting flowers and collecting nectar. *Students learned how managing stormwater responsibly helps to keep plants and pollinators and their habitats healthy*. A take home worksheet about pollinators was given to the students at the end of class to continue their learning at home.

Atala Butterfly Festival [Saturday, January 30th]

The River Center hosted our second Atala Butterfly festival! This festival was originally inspired by monarch butterfly festivals celebrating their migration. While Atalas do not migrate, they were once believed to have been extinct and now can only be found in certain parts of South Florida. This festival was designed to highlight the amazing comeback of these butterflies due to citizens creating butterfly habitats in their own gardens! At this year's event we offered a plant sale by two native nurseries: D.R. Bates Liners & Gallons and Nature's Backyard Nursery. In the garden, our environmental educator *Sam Warwick explained the benefits of*

native plants in supporting wildlife and water conservation to guests. Two of our Girl Scout Volunteers, Keira O'Neill and Ashley Pless, handed out seeds they had collected from the River Center's garden for our guests to take home and start their own native garden. In the classroom we had information about native gardening, plants, and butterflies, as well as an exhibit about the Atala's lifecycle. If was a beautiful day and a great event!

Homeschool Workshops

Water Properties [Wednesday, January 5th]

The River Center hosted a homeschool workshop for students ages 7 to 10. The lesson for this program was a Water Properties Lab with 12 students participating. This was an interactive lab that covered the properties of water including density, buoyancy, surface tension, and the phases of water by comparing two different water types (saltwater and freshwater). Students made the connection to salt, fresh, and brackish water of the Loxahatchee River in their experiments. The amount of available water affects how well an ecosystem will function. The water supply and salinity of the River is affected by not only stormwater but also human water usage from the aquifer systems. *Not enough water in the aquifers will lead to higher salt content in the River, which can be harmful to the ecosystem. By recycling wastewater, the LRD limits the amount of water being pulled from the aquifers for human usage and leaves the water for natural usage.*

Phenology [Friday, January 15th]

On January 15th the River Center hosted its second homeschool workshop in January for students ages 11 to 15. The program was titled Phenology at Play with four students participating. Phenology deals with the timing of nature's cycles, such as the blooming of a flower, the migration of a butterfly species, or the changing color of leaves in the fall. Successful organisms have timed their need for food to the life cycles of their food source. *In south Florida, many of our plants are adapted to both wet and dry periods in their life cycle. Water supply can be plentiful in the wet season, but scarce in the dry season. Animals have also adapted to this change in the water supply.* Students defined phenology, learned examples of the impacts of phenological changes on wildlife, and ways that different species react to phenological changes. Students looked at a citizen science project involving fly catchers, caterpillars, and oak trees in North America. We also explored and made observations between the milkweed plants and the Monarch caterpillars in the River Center's garden.

Upcoming River Center Events

RSVP at www.lrdrivercenter.org/events-calendar
rivercenter@lrecd.org or 561-743-7123

February 19, 4 pm – 6 pm: Sunset Nature Hike – Frenchman's Forest: Join the River Center on our Nature Walk through Frenchman's Forest. This is a beginner level hike with uneven, unpaved trails. Immerse yourself in this local natural area. Interested participants should wear closed toed shoes, comfortable clothing with long pants and bring plenty of water and bug spray. Make sure to RSVP to this event! Space is limited. Due to COVID-19, there will be staggered start times to accommodate more guests. No more than 8 guests per group.

February 24, 4 – 5 p.m.: Science with Sam: Select Wednesdays from 4:00 pm – 5:00 pm, join our Scientist Sam for different science activities for our K-5th grade aged children. Activities will include garden exploration and hands-on opportunities with wildlife. Each week has a different theme! There is no cost for this program but please RSVP to attend.

March 6, 10 am – 11:30 am: Bloomin' in the Garden: Let's go explore! Join the River Center for our Bloomin' in the Garden program, designed for children ages 3-7. The program will start at 10:00 am in the River Center Chickee Hut with a story time and a garden-themed craft. We will then move to our garden for a hands-on activity. When it is time to go home, children will receive a plant to take home to start their own garden! So, don't miss this exciting opportunity for your little ones to enjoy nature! Spaces are limited and RSVP is required. Only one adult per child please due to COVID-19 restrictions. Everyone must wear a mask. Please come prepared and dress comfortably for being outside in the garden. All equipment will be provided, and this program is free of charge. Donations are always welcome. Please RSVP to attend!

March 10, 4 – 5 p.m.: Science with Sam: Select Wednesdays from 4:00 pm – 5:00 pm, join our Scientist Sam for different science activities for our K-5th grade aged children. Activities will include garden exploration and hands-on opportunities with wildlife. Each week has a different theme! There is no cost for this program but please RSVP to attend.

March 16, 8:30 a.m. – 11 a.m.: North Jupiter Flatwoods Natural Area: Join the River Center on our Nature Walk through North Jupiter Flatwoods. This is a beginner level hike with uneven, unpaved trails. Immerse yourself in this local natural area and enjoy spring wildflowers. Interested participants should wear closed toed shoes, comfortable clothing with long pants and bring plenty of water and bug spray. Make sure to RSVP to this event! Space is limited.

MEMORANDUM

To: D. Albrey Arrington, Ph.D., Executive Director
From: Travis Bains, CSHO, ENS, Safety Compliance Officer
Date: February 10, 2021
Subject: District Safety Report for January 2021

Safety Metrics: January 2021
OSHA recordable injuries: None
Lost time injuries: None
Actual TRIR: **4.0**
TRIR = Total Recordable Incident Rate [Goal <4.4]
Goal Zero For 2021

Safety is a Core Value at LRD *Our conduct is shaped by a personal commitment to protect the health and safety of ourselves and our colleagues. Safety is driven through education, training, planning, protective equipment, and individual accountability.*

Safety Committee January 2021

The Safety Committee had its first official meeting for 2021. The focus of our meeting was the new Near Miss Program. The Near Miss Policy was approved by the Governing Board in March 2020. While our program has made some progress, we have realized we need to improve participation in our Near Miss program throughout the District. We need everyone's participation. **As District Safety Officer, I am confident that an effective Near Miss program is a strong, proactive tool that will help us identify weaknesses and systematically improve workplace safety.** The Safety Committee is imploring everyone to report all near misses, or what might be perceived as a near miss to the Safety Officer, your supervisor, or any of our Safety Committee members. This effort cannot be successful without everyone's participation.

The Safety Committee members are: Travis Bains, Jason Pugsley, Jim Novak, Jocelyn O'Neill, Deveyand Dave, Anthony Nicoletto, Jason Broadrick, Jerry Metz, and Charles Talledo. Our purpose is help reduce the risk of workplace injuries and illness and ensure compliance with federal and state health and safety regulations as well as District Safety Policies.

The Safety Committee welcomes your engagement. Please direct any safety-related questions to a team member or myself.

Training

Engineering, Construction and Collections personnel participated in 811 Sunshine (locates) training with John Segovia. The training consisted of utility color coding, ticket entry, low impact marking and high priority subsurface installations, liabilities and enforcement, and ticket close out. These employees work in the environment of close proximity of other assets on a daily basis.

This month the District Safety Officer worked with crews to conduct targeted hazard analyses for the following projects:

Confined Space (Engineering/Collections)

Primary hazards: leading edge safety (laying tools and equipment on edges), confined space, ventilation (air changes per hour), hazardous communication, gas monitoring (bump testing and calibration date checks), inspection of emergency retrieval system (davit arm and personal harness).

Job Hazard Analysis: Permitted Confined Space, Atmospheric Hazards, Depth of well safety (ladder safety).

Job site safety assessment conducted.

Pulling pumps for maintenance (Collections)

Primary hazards: stored electrical hazards, falls (leading edge/working over open pit), cuts/scraps (proper gloves), crane set up soil stability (crane pad mats), maintenance of traffic, public (onlookers and pedestrian pathways), strains (back strain and proper lifting).

Job Hazard Analysis: toolbox talk and Lock out/Tag out

Job site safety assessment conducted.

Installing Low Pressure Assembly (Construction)

Primary hazards: maintenance of traffic, underground utilities (811 Sunshine), power tool inspections, pressure on pipe, raw sewage, excavation/trenching and shoring when pit depths are greater than 4-feet, valve leak-by.

Job Hazard Analysis: toolbox talk.

Job site safety assessment conducted.

Road patching (Construction)

Primary hazards: maintenance of traffic (oncoming traffic, distracted drivers), power tool inspections, fires, hot surfaces, propane torch (blower, open flame) leather gloves, heavy lifting,

Job Hazard Analysis: toolbox talk.

Job site safety assessment conducted.

Low Pressure Inspections (Collections)

Primary hazards: animals, hazardous aerosols (Raid-like bug killers), maintenance of traffic, hazardous atmosphere, assessing atmospheric conditions, personal protective equipment, electrical hazards (lockout/tagout)

Job Hazard Analysis: toolbox talk.

Job site safety assessment conducted.

Finally, I would like to commend the Collections Division on completing 42 job hazard analyses this month. I am pleased to see their diligent efforts to proactively assess their job hazards!

Safety Quote of the month: *"It's not about chance, rather circumstance"*

LOXAHATCHEE RIVER DISTRICT

Celebrating 50 Years, 1971-2021

MEMORANDUM

TO: Governing Board

FROM: Administration Staff

DATE: February 9, 2021

SUBJECT: Consultant Payments

The following amounts have been reviewed and approved for payment to our consultants for work performed during the prior month.

	Prior Month	Fiscal YTD
Shenkman, PA	$12,400.00	$39,721.90
Baxter & Woodman	$11,383.60	$37,408.90
Carollo	$14,240.00	$14,240.00
Holtz	$18,584.75	$50,543.65

Should you have any questions in regard to these items, please contact Kara Fraraccio concerning the attorney's invoice, and Kris Dean concerning the engineers' invoices.

J:\BOARD\CONSULT2021_CURRENT.DOCX

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loxahatcheeriver.org

Future Business

Neighborhood Sewering:

- Preliminary Assessment – Country Club Drive
- Preliminary Assessment – Thelma Avenue

Other:

- Greenhouse Gas Emissions Evaluation Engineering Study
- Master Lift Station Bypass Engineering Study
- 20 Acre Site Plan Engineering Contract
- BLM House Demo & Renovation Engineering Contract
- Sludge Dewatering-OdorControl Engineering Contract
- Injection Well Pump Station Emergency Generator Connection Engineering Award
- IQ 511 Pump Station Piping Improvements Construction Contract
- Rules Chapter 31-10 Rates, Fees and Charges
- DEP Grant Approval -Nano Bubble Ozone Technology (NBOT) Project
- Green Water Solutions Contract Approval for NBOT Project
- Chapter 31-16 (April)
- Review of Strategic Plan Implementation (May)
- Board discussion on Ecosystem Enhancement (November)