

SNY ISLAND LEVEE DRAINAGE DISTRICT

2021 ANNUAL NEWSLETTER

Can you believe it? We're about to pull the curtain down on yet another year in the Sny. It compares to finishing another chapter in this ongoing saga recounting life in this drainage district. In looking back on events that have shaped this organization since its inception in 1871, one can arguably cite but a few events or activities that have impacted life in the Sny in a positive way not only for immediate benefit, but is hugely beneficial down the road for generations to come as much as what is soon to be accomplished yet this year or early in 2022.

Obviously, the foundation was put in place in 1871 when the initial organization of the Sny was introduced in Springfield. Imagine, if you will, no drainage law existed in the State of Illinois before that. It came about because of the Sny. Even though the effort to organize in 1871 was found to be unconstitutional, it did not deter its organizers from pressing forward. The dye

was cast. The Sny was going to happen!! In 1879, it did become official. The Sny officially and legally came into being. Because of those events in the 1870s, the stage was set for events to occur that brought us to where we are today.

State of Illinois, } ss. County of PIKE, }
Collector's Office, Sny Island Levee Drainage District.
Pittsfield, Pike County, Illinois, Dec 4 1884
RECEIVED OF Fred Huffman the
sum of Fourteen Dollars and 74 Cents
full of the first annual assessment upon the following described land for the repair and maintenance
of the levee located in said district, which said assessment and installment were approved by the County
Court of said County and State, at its July Term, 1883.

DESCRIPTION.	SEC.	TOWN.	RANGE.	ACRES.	ASSESS.	INSTAL.	INTEREST	TOTAL.
Wid. A W	21	5	6	99				14.74

First Assessment Notice - 1884
Marcus Hardy COLLECTOR.

A revenue bond case that threatened the very existence of the Sny worked its way through the courts for nearly 24 years before it was finally resolved by the United

States Supreme Court in 1902. The Sny retained the services of former President Benjamin Harrison for legal representation as the litigation moved through the Federal Court system. Harrison passed away before it reached the Supreme Court, so the Sny retained the services of Harrison's Attorney General, W.H.H. Miller, to represent the landowners in arguments before the Supreme Court. The Sny prevailed. Again, by prevailing in this litigation, we were able to continue on the path to where we are today.

River and interior flooding were still prevalent, with at least 16 river levee breaks recorded in the late 1880s and early 1900s. However, the Sny persevered until the mid-1960s when a major event charted the Sny on a course that brought us to now.

A major building block that opened the door to the possibility of prosperity in the Sny occurred in the 1960s when out of the 1946 and 1954 flood control acts, the Sny as we know it today came about. The Sny project was constructed with the cooperation of the Federal Government and the Sny landowners. Washington, D.C. recognized the potential of a massive public works project known as the Sny by contributing nearly \$16,000,000.00 to the project while Sny landowners added more than \$3,500,000.00 to construct the District as we know it now. The river levees were improved, three pump stations were constructed, sedimentation basins came into being and diversion channels were constructed. Completed



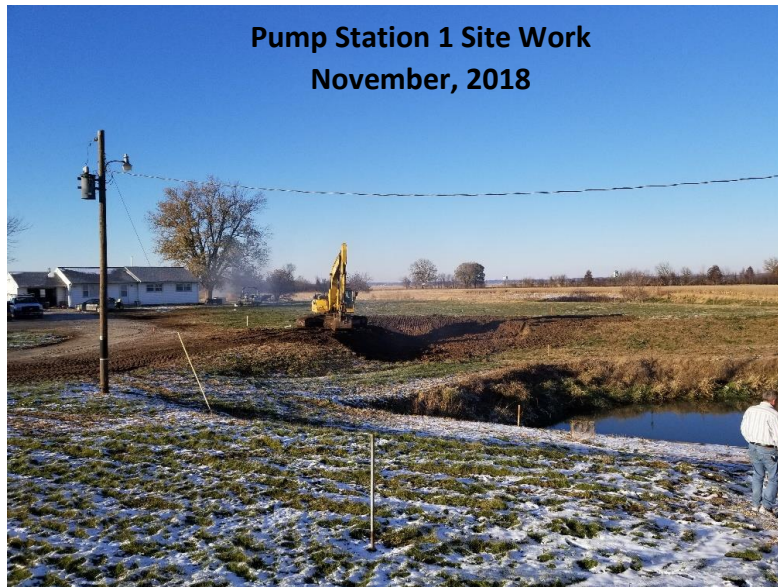
in the 1960s, the project has served the landowners well for more than 50 years. Opportunity for all who dared was there because of that work.

September 19, 2017 is yet another memorable date in this chapter of the Sny. The Commissioners' petition was filed with the Circuit Court in Pittsfield requesting permission, that was ultimately granted, to construct four miles of seepage berm at the north end of Reach 1 and two new pump stations. Again, another massive public works project with about a \$25,000,000.00 price tag undertaken by the landowners of this system to not only provide immediate relief from ever present interior flooding as well as additional protection from ever increasing high river stages. But at the same time, it enhances opportunities for future generations in the Sny to live and enjoy our way of life in this valley. We are thankful for the visionaries who have led and continue to lead the Sny to what we have today and to set the stage for future visionaries to continue the legacy that has been handed down over the generations.

16th ADDITIONAL ASSESSMENT

PUMP STATION 1 – HULL, ILLINOIS

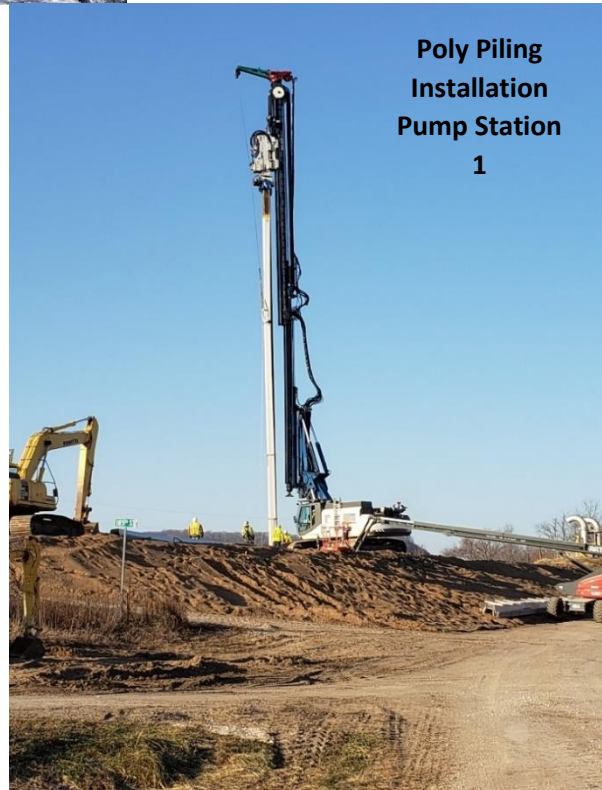
The three components of the 16th Additional Assessment were the four miles of seepage berm and two new pump stations. We covered the work on the seepage berm in the 2019 newsletter. We got it finished in time to withstand the 2019 flood event; the second highest flood crest in the history of the Hannibal gauge.



**Pump Station 1 Site Work
November, 2018**

Moving on to the two new pumps stations is another story. Both projects have been under construction for more than three years. Work at Pump Station 1, with an estimated construction cost of a little more than \$10,300,000.00, started in November, 2018 by Bleigh Construction of Hannibal, Missouri. Work progressed on through the winter months, but 2019 brought work to a screeching halt. The 2019 flood event caused

a delay for several months as contractors at both Pump Station 1 and 3A moved their assets out of the floodplain. Work resumed in late summer/early fall and really kicked into high gear in 2020. A key component of the Pump Station 1 project was the installation of polyethylene sheet piling to cut off troublesome seep water that was causing sinkholes to develop around and under the existing Pump Station #1. A row of piling was driven through the top of the levee with another row driven on the pump station side of Swain Slough Road to provide a barrier blocking some of the seepage and forcing what was left much deeper and further out away from the old pump station. The new pump station was constructed on piling that prevents seep water from becoming an issue at the structure since



**Poly Piling
Installation
Pump Station
1**

the steel piling blocks any residual seepage forcing it away from the structures.



Pump Station 1
November, 2018



Pump Station 1
December, 2020

The new pump station at Hull features two 58" Pentair pumps powered by two 1,500 hp MTU diesel engines. Our current pump station at Hull has the capacity to pump up to 400,000 gallons of water per minute under optimum conditions. In fact, our existing pump stations operate about as efficiently as you would want under normal to just above normal river conditions. The new pump station is capable of pumping another 315,000 gallons of water per minute under those same conditions. However,



Pump Station 1 Discharge Outlet
To The River – January 2021



Pump
Station 1
January
2021

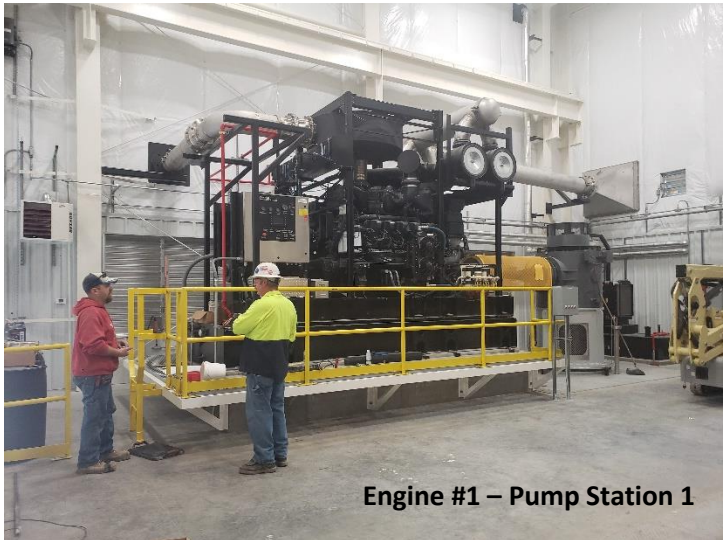
during these ever-increasing high water events on the Mississippi, the pumping efficiency of our existing pumps is minimal at best. For example, during the 2008 flood event, we lost ground every

day on the Sny just from the amount of seep water coming into the District. We were burning 7,200 gallons of diesel fuel about every day and a half to power our three pump stations, yet



Pump #2 at Pump Station 1 Being Lowered Into Place.

the Sny continued to raise. We were beginning to flood from within the system because we couldn't pump the seep water out fast enough. These new pumps are much more efficient during flood events when the river is high. Even during a 100-year flood event, the pumping capacity at the new Pump Station 1 is about 230,000 gallons per minute. Make no mistake, we will continue to



Engine #1 – Pump Station 1

maintain and operate our older pumps along with the new pumps, when necessary.

Our new pump stations are also extremely resilient in that the engines/pumps and most electrical components are on the second floor of the structure elevated to withstand potential future flood events. Another feature different from our current stations is the engines have radiators exposed to outside air that circulate coolant to the engines similar to an automobile. Our older pump stations have the radiators submerged at the bottom of the pump bays with



**Radiators
Pump Station 1**

the coolant circulating through them to the engines cooled by Sny water. If a leak occurs in our current submerged radiator systems, we have to de-water the pump bay to find the problem. This repair process can take at least 3 – 4 days to accomplish. If an issue develops with these new cooling systems, they will be much easier to troubleshoot and repair. The Sny assumed control of the station on November 18, 2021. If needed, the station is operational.



**Ground Floor
Pump Station 1**



Pump Station 1 – August 2021

PUMP STATION 3A PLEASANT HILL, ILLINOIS

Ground was broken at the new Pump Station 3A site, with an estimated construction cost of almost \$11,120,000.00, in December of 2018 by Magruder Construction of Eolia, Missouri. The new Pump Station 3A will be equipped with two, 72" diameter/78" discharge Pentair pumps powered by two 2,000 hp. MTU



**Pump Station 3A
December, 2018**

diesel engines purchased from Central Power Systems and Services headquartered in Liberty, Missouri. Our existing Pump Station 3A is equipped with three 72" diameter/78" discharge pumps capable of pumping 540,000 gallons per minute of water under optimum conditions. The problem is when river conditions are extremely high, the pumping efficiency of our current pumps drops off

significantly, the same as those located at Pump Station 1 in Hull. The two, new 72" Pentair

pumps are capable of pumping 435,000 gallons of water per minute under optimum conditions



Pump Station 3A
January, 2019

such as what we have seen throughout much of this year. However, in a 100-year flood event, the new pumps will still move about 340,000 gallons of water per minute. So the drop off during extreme flood events is minimal. When looking at the combined capacity of Pump Stations 1 & 3A, the old pump stations are capable of pumping 940,000 gallons of water per minute under optimum conditions. By adding the capacity of

the two new stations, that amount increases to 1,605,000 gallons of water per minute. This

should make a huge difference in getting water out of our system during heavy rain events we have experienced in the system over the last few years. Work at 3A was also delayed for several months due to the 2019 flood event. However, work began in August as can be seen in the adjacent image and has continued



Pump Station 3A
August, 2019

since. Two aspects of the 3A project that differ from Pump Station 1 is that 3A did not require the polyethylene cut-off wall and due to the orientation of the pump station at Pleasant Hill, the two 30,000 gallon fuel storage tanks and containment area had to be moved.

**Pump Station 3A
January, 2020**



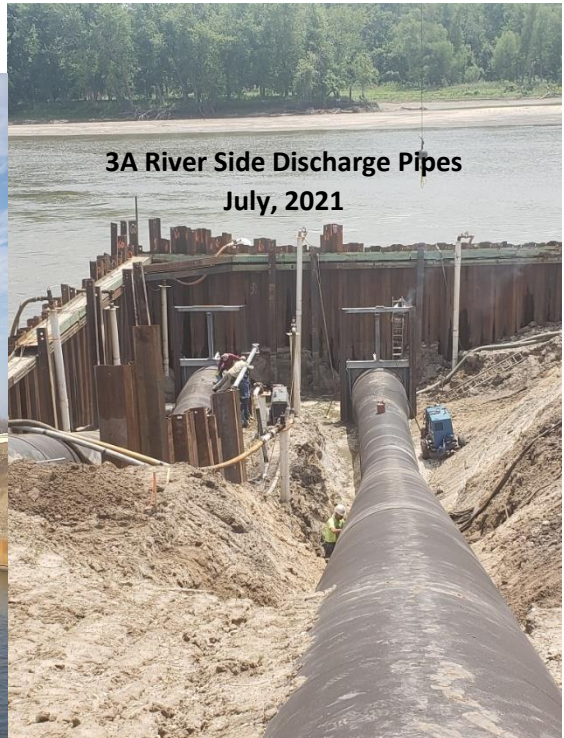
**Pump Station 3A
August, 2020**



**Pump Station 3A
January, 2021**



**3A River Side Discharge Pipes
July, 2021**





**Pump Station 3A
2,000 hp.
Engine Being
Lowered Into
Place**



**Pump Station 3A
Pump #2 Being
Lowered Into Place**



**Pump Station 3A
Both Engines and
Gearboxes in Place**



**Both Pump Stations at 3A Site
December, 2021**

As of this date, work is ongoing at the new pump station at the 3A site. Grounds work is being finished. Testing of equipment is underway. Engine reps are to be on site the week before Christmas to prepare the engines for testing. Some electrical work continues along with fine-tuning the installation of the outside exhaust piping. We do anticipate the new Pump Station 3A to be operational late winter/early spring of 2022. Both of the new pump stations will be utilized for primary pumping operations until the various warranties run out.

2021 PUMPING OPERATIONS

Interesting and challenging year at the Sny's three pump stations. We were not without our challenges in a couple of ways. We are extremely short on part time pump station operators at all three of the District's pump stations, with openings on all three shifts at all locations. If you are interested in some part time work or know of someone looking for a part time job, please let us know. We will provide training and support for as many hours as you want. Our starting pay is \$12.00/hour plus mileage. **WE NEED HELP!!!!**

We were also challenged by some significant breakdowns at Pump Stations 3A and 4 that



caused some sleepless nights. At Pump Station 3A we encountered the failure of an oil pump on one of our three 800 hp. diesel engines requiring field technician-assistance from Fairbanks Morse in Houston, Texas to get us back up and going. We also had a leak in the radiator system submerged in the #1 pump bay at 3A requiring the de-watering of the bay to complete the repairs. This was done using our staff.

During a routine maintenance visit from Altorfer Cat this spring, we found a serious problem with one of our three engines powering our pumps at Pump Station 4. As it turned out, the engine required a complete overhaul. Repairs were completed at Altorfer's Hannibal facility with the engine back on line on April 20. Also as part of our routine maintenance at the end of the fall, pump #2 at Pump Station 4 was removed and taken to Averkamp Machine in Quincy to replace bearings and bushings as well as check the overall condition of the pump. This work had already been accomplished in the last couple of years to the re-conditioning of this last pump puts us in good shape going forward. The pump has since been re-installed and is ready to go.



The Aftermath of the May, 2021 Rain Event

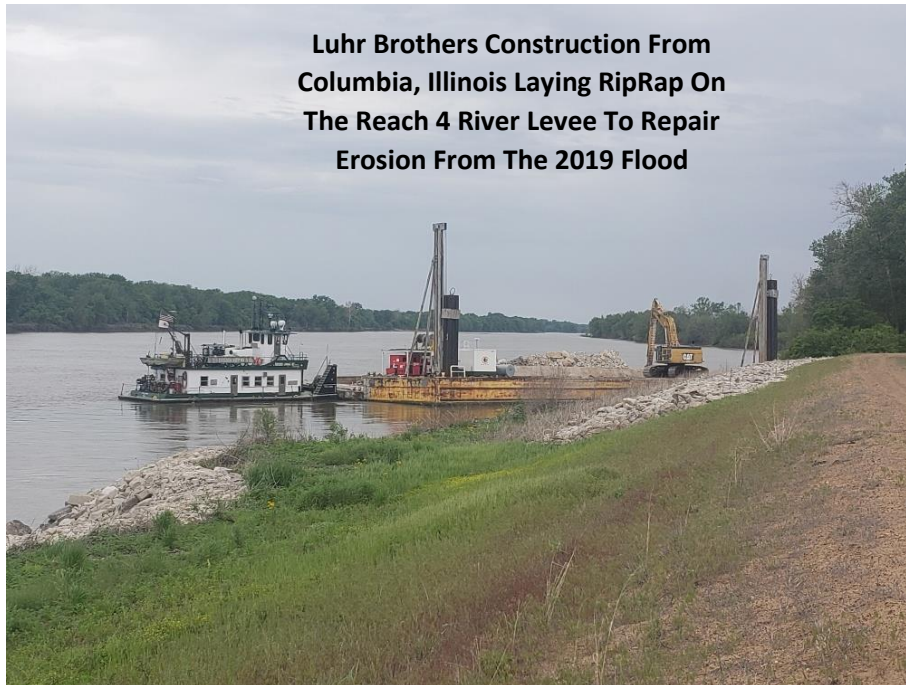


Operationally, the pump stations were busy in spurts during the year. We experienced a heavy rain event in mid-May, mainly at the north end of the system, followed by a torrential event dropping generally 10" – 11" of rain all over the system with some sections reporting 13"+. Internal flooding was experienced in many areas with the pump stations running 24 hours/day, 7 days/week. Then we had another heavy rain system run through the north part of the District again in late October causing issues mainly in Reach 1, but some of it trickled down to Pump Station 3A. Please note below a report on diesel fuel usage at all three of our pump stations combined for 2021. The historical perspective gives you a comparison of fuel usage from year to year and the impact that can have on our budget. What has been beneficial this year is we have been able to keep our gravity

outlets open at Pump Stations 3A and 4 reducing our pumping costs late this fall and winter since river conditions are quite low. However, we have used less fuel in 2021, but the price for fuel was up by anywhere from \$0.75 to \$1.00 per gallon over what we paid in 2020. Given our current economic conditions, we're quite concerned with what prices will be for 2022.

Total Gallons of diesel fuel delivered to pump stations 1, 3A, & 4 "by month" per individual year.													Yearly
	January	February	March	April	May	June	July	August	September	October	November	December	Total Gal
1996	0	0	43,708	21,650	108,839	58,505	22,202	0	0	0	29,207	7,400	291,511
1997	0	14,518	36,478	7,300	58,119	22,309	0	0	0	0	0	0	138,724
1998	0	30,005	36,204	80,214	59,260	44,014	45,005	15,001	14,435	0	29,701	0	353,839
1999	0	14,701	22,000	59,700	29,301	52,099	22,102	0	0	0	0	22,199	222,102
2000	0	0	0	0	0	37,105	14,900	0	0	0	0	0	52,005
2001	0	7,402	29,909	44,014	111,912	59,171	22,627	0	0	0	0	0	275,035
2002	0	0	15,057	29,800	112,357	44,506	0	0	0	0	0	0	201,720
2003	0	0	0	0	21,730	29,311	14,808	0	0	0	0	14,804	80,653
2004	0	0	44,123	14,732	29,916	43,718	0	14,694	15,000	0	0	0	162,183
2005	0	0	29,596	14,604	35,905	0	0	0	0	0	0	0	80,105
2006	0	0	14,698	15,061	7,484	15,100	0	0	0	0	0	0	52,343
2007	0	0	0	37,038	29,583	0	44,702	21,911	0	0	0	0	133,234
2008	0	22,734	37,006	22,195	126,786	126,478	119,234	29,975	44,918	0	0	22,098	551,424
2009	22,384	0	37,587	51,600	90,230	37,084	7,600	22,697	0	29,728	74,535	22,549	395,994
2010	0	15,170	50,981	75,016	60,111	118,892	88,951	74,564	82,060	14,684	7,600	0	588,029
2011	0	14,760	44,874	82,244	82,694	89,616	22,454	14,600	0	0	0	0	351,242
2012	0	22,235	0	15,000	7,500	7,451	0	0	0	0	0	0	52,186
2013	0	0	22,501	97,087	156,097	103,911	22,585	0	0	0	0	0	402,181
2014	0	0	0	37,109	30,198	37,200	81,354	22,204	22,031	29,590	0	0	259,686
2015	0	29,718	0	0	14,520	125,588	125,849	22,205	0	0	15,002	80,999	413,881
2016	29,346	14,863	36,179	14,621	36,611	0	22,366	14,405	21,927	14,704	14,813	7,598	227,433
2017	14,845	7,503	15,113	37,515	134,157	51,795	7,002	0	0	7,359	0	7,338	282,627
2018	0	7,500	14,849	22,237	29,953	21,830	30,337	7,415	14,666	66,106	22,636	29,727	267,256
2019	29,592	37,395	67,447	140,895	176,117	110,891	59,532	29,537	14,892	51,993	29,542	22,427	770,260
2020	44,890	22,366	96,023	65,854	37,230	73,396	36,731	7,435	0	0	0	0	383,925
2021	0	9,004	75,245	44,266	45,001	14,928	44,591	14,645	7,301	14,213	0	0	269,194

Believe it or not, we're still dealing with repairs to damages to our levee system from the 2019



**Luhr Brothers Construction From
Columbia, Illinois Laying RipRap On
The Reach 4 River Levee To Repair
Erosion From The 2019 Flood**

flood event. We experienced severe shoreline erosion to our mainstem river levee in Reach 4 plus considerable erosion damage to a Bay Creek levee just upstream from the Illinois 96 highway bridge south of Pleasant Hill. Both projects were submitted to the Corps of Engineers for funding under the Federal PL84-99 program that provides

assistance for such repairs. Both projects qualified for Federal assistance with all repairs fully funded by the Corps. Private contractors were secured to complete the repairs on both sites with the river levee work completed this past summer and the Bay Creek project wrapped up this fall.

The image on the right was the completed erosion repair on a section of Bay Creek levee at Illinois 96. The re-grading, bedding stone and riprap repairs were completed early this fall by the construction company "Better By Design" headquartered in Brookfield, Missouri.

It needs to be noted again the great cooperation we had from the staffs with both the St. Louis office of the Corps of Engineers led by Col. Kevin Golinghorst and the Rock Island Office led by Col. Jesse Curry in getting these repairs successfully completed.





Col. Curry from the Rock Island District touring Pump Station 1

In addressing our relationship with the various Corps offices, we have been fortunate to have scheduled visits to the Sny this year not only with the new commander of the Rock Island District, Col. Jessie Curry, and some of his senior staff, but also with the Division Commander of the Mississippi Valley Division headquartered in Vicksburg, Mississippi, Maj. General Diana Holland, (pictured below) and members of her senior staff at Pump Station 1. Maintaining a good working relationship with all Corps offices is critical as we work on issues affecting the operation and maintenance of our flood protection system.

We would be remiss if we didn't take this moment to thank each and every one of you landowners of the Sny for making it possible for us to offer the level of maintenance operational efficiency required to run a top-notch levee and drainage district. It is only through your support that we can work each and every day to create conditions that will not only protect you from the potential ravages of the flooding from the Mississippi River,



but also provide the drainage of your property from interior flooding. We thank all of you for the privilege of serving you as best we can.

Brady Borrowman
Brady Borrowman – President

Russell E. Koeller
Russell Koeller – Secretary

Dan Lundberg
Dan Lundberg - Commissioner

And finally, as we close out 2021 and celebrate the ringing in of 2022, we want to wish all of you the very best that the new year has to offer. It is our sincere hope you have a safe, healthy and prosperous 2022. We look forward to continuing to serve you in the coming year.

SNY ISLAND LEVEE DRAINAGE DISTRICT
STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES
GOVERNMENTAL FUNDS
YEAR ENDED OCTOBER 31, 2020

	General Annual Maintenance	Special Revenue Fund Reserve Fund Seepage	Capital Projects Fund Reserve Fund Fall Creek	Debt Service Fund	Total Governmental Funds
REVENUES					
Assessments - general	\$ 1 872 301				\$ 1 872 301
Assessments - 16th additional assessment					1 734 238
Disaster income	992 282			\$ 1 734 238	992 282
Material and pipe sales	59 840				59 840
Lease income	17 500				17 500
Farm income	32 504				32 504
Donation	5 000				5 000
Investment earnings	142 199	\$ 3		1 564	143 766
Interest on 16th additional assessment				611 015	611 015
Miscellaneous	12 310			1 571	13 881
Total revenue	3 133 936	3	-	2 348 388	5 482 327
EXPENDITURES					
Current:					
General administration					
Payroll	135 947				135 947
Office supplies	6 797				6 797
Building utilities and maintenance	10 907				10 907
Insurance	141 273				141 273
Legal and audit	388 782				388 782
Miscellaneous	52 407				52 407
Pumping Operations					
Payroll	254 823				254 823
Operating expenses	820 665				820 665
Heavy Equipment Operations					
Payroll	86 269				86 269
Equipment expenses	35 190				35 190
Other Operations					
Payroll	40 564				40 564
Equipment expenses	61 614				61 614
Pipe and wire rope	51 006				51 006
Shop supplies and maintenance	11 197				11 197
Levee and ditch maintenance	92 746				92 746
Miscellaneous					
Payroll taxes	43 661				43 661
Employee benefits	145 279				145 279
Debt Service:					
Principal	837 978			1 506 000	2 343 978
Interest	77 401			712 884	790 285
Capital Outlay:	7 719 936				7 719 936
Total expenditures	11 014 442	-	-	2 218 884	13 233 326
OTHER FINANCING SOURCES					
Transfers	2 415 388	(1 862 931)	(578 148)	25 691	-
Sale of capital assets	40 950				40 950
Net change in fund balances	(5 424 168)	(1 862 928)	(578 148)	155 195	(7 710 049)
Fund balances - beginning	13 560 364	1 864 445	578 235	2 199 059	18 202 103
Fund balances - ending	\$ 8 136 196	\$ 1 517	87	\$ 2 354 254	\$ 10 492 054

The accompanying notes are an integral part of these financial statements.