

Board of Commissioners
Sny Island Levee Drainage District

2012 ANNUAL NEWSLETTER

What a difference a year makes! In 2011, we experienced extremely wet conditions early in the year with some forecasts predicting a flood event in 2011 that might equal or exceed the 2008 flood. This image showing the levee pushup and plastic from 2011 was shown on page



two of last year's newsletter as a reminder to you of what some thought we would be facing. Fortunately, those predictions were **WRONG!** We did experience some serious rainfall early in 2011, but it quit raining late in June and it hasn't rained or snowed a whole lot since. There's an old saying, *"I've got good news and I've got bad news. Which do you want to hear first?"* Well, in 2012 we didn't have to purchase much diesel fuel for the pump stations because they didn't run

much. That's the good news! In 2012 we didn't have to purchase much diesel fuel for the pump stations because they didn't run much. That's also the bad news! Much of the District and for that matter a lot of the entire State of Illinois experienced drought conditions that really took hold in mid-2011 and continued on through all of 2012. And besides that, **IT WAS**

HOT! "Crop yields weren't the greatest" would be an understatement in many parts of the Sny. However, we made it through and as is always the case, we eagerly anticipate a successful year in the Sny in 2013. We remain optimistic. After all, this is the Sny. We were just raised that way. Now, fast forward to late summer, 2012. Yes, this is the same levee section. You're not seeing double. Well, not really. This image shows the same levee section that due to the



extremely dry conditions this year was re-sloped and seeded to provide protective sod cover on the river side. This image might best describe 2012: REPAIR AND MAINTENANCE.

From the spring of 2008 until the summer of 2011, the vast majority of our time was spent either operating our pump stations or working on the main stem river levee. Not much time was left for routine maintenance or major repairs. We were facing flood threats from both the river as well as inside the District due to excessive rainfall. We were also racing against the clock to complete necessary land side slope maintenance on our main stem river levee to



satisfy federal requirements for continuing our certification of having 100-year flood protection. You might recall images such as the one to the left or the others below that show sand being dumped on the land side slope of the main stem river levee. We estimate that nearly 1,000,000 cubic yards of sand was placed on these slopes to remedy deficiencies. Sand was hauled from dredge sites at Lock and Dam 22, and

other areas of Reach 1 locally known as Mathena's Crossing and the Hackler Farm. In Reach 3, sand was provided via mechanical placement by Smith Quarries in Louisiana at a number of staging areas from Snyder's Landing south to the Delair Division of the Mark Twain Wildlife Refuge. This critical levee maintenance was completed on time. Appropriate documentation supporting the Sny's 100-year flood protection certification was submitted to FEMA for review. We are currently awaiting their comments on the information provided.



PUMP STATIONS



Indeed, 2012 offered a stark contrast in the operation of the District's three pump stations from 2008 through June of 2011. During most of that 3 ½ year period, the gravity outlets allowing the Sny to free flow to the river remained closed due to high river conditions. When the gravity gates are closed, you know

what that means. The pump stations are usually running. The following quantities of diesel fuel were

purchased for use at the Sny's three pump plants from 2008 – 2011: 2008 - 551,424 gallons; 2009 - 395,994 gallons; 2010 - 588,029 gallons; 2011 - 351,242 gallons. Those totals reflect an average of 471,672 gallons of diesel fuel purchased per year over that 3 ½ year time frame. In 2012, we purchased 52,186 gallons. Quite a difference!



Sny Staff Dis-assembling
Pump Impeller at Pump Station 1

However, due to the amount of pumping hours that



accumulated over that 3 ½ year period, the equipment suffered a lot of wear and tear. Both pumps at Pump Station #1 were repaired along with one of the gearboxes. Two gearboxes and two pumps at Pump Station 3A underwent repairs, which were finished this year. Once repairs

were complete, both pump stations including all of their components went through a thorough cleaning/de-greasing program. Loose paint was removed from all equipment and the floors. Roof repairs were also completed on all three pump stations. Pump Stations 1 & 4 have been re-painted. Pump Station 3A is set to be re-painted this winter.

A major project scheduled at Pump Stations 1 & 3A in January is the installation of emission control systems for all five of our Fairbanks Morse engines at those two locations. This \$250,000.00 project is mandated by new EPA emission standards to take effect in 2013. Emissions from these engines not only are required to be cleaned up, but must also be constantly monitored during operation. Officials from Fairbanks Morse engine of Beloit, Wisconsin are scheduled to begin the installation at Pump Station 1 on January 7 with work at 3A to immediately follow.

In addition to that, oil consumption on engine #1 at Pump Station 3A has been an issue since the unit was overhauled by Fairbanks Morse in 2005. In operating the unit since that time, as with all of our pump station equipment, detailed records of performance are maintained. Sny officials immediately informed Fairbanks Morse in 2005 that oil consumption on engine #1 was greater than expected. (It should be noted that the Fairbanks engines are designed to use from ¼ to ½ gallon of oil per hour of operation. Consumption of oil on engine #1 was 2 to 3 times that of oil used by engines #2 & #3.) Fairbanks Morse has diagnosed the problem as piston wear. The pistons on #1 will be replaced at no charge to the District in March of 2013.

FIELD OPERATIONS

If there's one thing all of this dry weather is good for, it's maintenance on the District ditches. Those maintenance activities include not only excavating fill from the ditch but also



Wagway Brush Cutter
Clearing Brush from River Levee
Riprap

the removal of brush from ditch banks. Some time ago, the District added to its brush control capabilities by purchasing a hydraulic thumb attachment as well as a used Wagway brush cutter attachment for the Cat 324DL excavator. In particular, the thumb attachment on the 324 allows for the removal of brush by pulling it up off the ditch banks rather than having to dig it out. Removal of the brush with the thumb makes for a much cleaner approach and also allows the brush to

be stacked and carried along the ditch bank as the excavator moves along rather than digging it out and laying it in the field for a bulldozer to pile. Upon completion, the entire project area is much cleaner. The addition of this equipment coupled with the Alamo brush cutting unit that works with one of the District's John Deere 7710 tractors has allowed for more timely removal of brush from river levee riprap as well as the Sny channel and district ditches. Often times, both the excavator and John Deere coordinate work on the same project with the excavator removing the larger brush followed by the Alamo unit on the John Deere mowing off the smaller vegetation. Another key component to our brush control program is the District



324DL removing brush from
Old Bay Creek – Reach 4

Alamo unit putting finishing touches on Hull Town Ditch. Brush piles from operation of Cat 324DL are in the background



providing landowners with crossbow to apply to brushy growth on District ditches. This year, the Sny spent nearly \$13,000.00 on this particular aspect of its brush control program.

Of course, when we speak of ditch maintenance, we first think of removal of fill from ditches to facilitate quicker drainage. A key to this

part of our ditch maintenance program is you, the landowner. You see your ditches on a much more regular basis than our staff. As has been noted earlier in this report, our staff concentrated mainly on pumping, flood fighting, flood cleanup and work on the river levee for nearly 3 ½ years. Because of that, we have fallen behind in ditch excavation. If your District ditch needs attention, please call. Upon receiving your call, our staff will review the condition

of the ditch, put it on the schedule for cleaning, contact landowners adjacent to the ditch regarding the placement of spoil and handle contacting JULIE regarding utility location.



**Wells Extension
Long Pond Ditch – Reach 3**



Going right along with the maintenance of District ditches in the Sny's field operations is the maintenance of creek channels. The District is responsible for the maintenance of nearly 40 miles of creek channels including the mowing of all the levees. The Corps of Engineers requires that all Federal levees be mowed at least two times per year. Weather conditions may call for more than that. The District's mowing program usually starts in late April and runs continuously through November annually. Two John Deere 7710 tractors, each pulling 15' Bush Hog mowing units, run daily weather providing.

A major aspect of the creek work involves the alignment of the channel. Over the years, the creek channels decide to start meandering where they want to rather than staying in what we would call an appropriate alignment. If not corrected, these meanderings can threaten the integrity of the levee itself or the creek will break out and flow through cropland inside the creek levees rather than continue down the channel. With the conditions as dry as they've been in the last several months, this past summer has provided ideal conditions to correct some channel alignment problems.



McCraney Creek north of the Norfolk Southern railroad bridge – Reach 1



The picture on the left reflects the condition of the McCraney Creek channel following corrective action. We continue to experience these alignment issues throughout the District. We hope to correct these problems experienced in other parts of the District throughout the rest of this winter if conditions allow for it.



One of the two new tubes for the Cockleburr Slough outlet to the Sny being delivered.

Another aspect of our field operations is to insure that District drainage tubes providing efficient and optimum flow from main ditches into the Sny channel are functioning properly. This past summer, a 6' X 70' steel tube equipped with a flapgate serving as the Cockleburr Slough outlet to the Sny was replaced by the staff. ½" thick steel tubes purchased from a firm in Alton were used rather than what would normally be considered heavy gauge galvanized

tubes. Rather than just banding the two tubes together before installation, they were



New tubes being positioned for installation



Installation nearly complete

welded. The flapgate was adapted in the field by the staff to fit the new tube. Following the installation, the upstream and downstream banks of the Sny and ditch were then riprapped to provide stability.

As you might recall from past newsletters, Cincinnati Township has played a leading role in the last couple of years providing assistance in constructing roads along formerly inaccessible sections of river levee. Pictured at right is the construction of a road in 2010 running along the mainstem river levee to the Hadley McCraney Diversion Channel made possible by the township. Another section was constructed in 2011 running northward from the north terminus of



this road to Pump Station 1. Another field project to be undertaken in 2013 that would not be possible without the help of Cincinnati Township is the construction of a maintenance road to be used for flood fighting that will run north from Lock & Dam 22 toward what is locally known as the Hackler Farm. Cincinnati Township has made a significant monetary pledge that will pay for the cost of trucking from a local trucking company along with furnishing one of its trucks, a trailer and a driver. The Sny will be furnishing two trucks as well as equipment to load the trucks and to spread the gravel on site. This project should get underway in January, weather permitting.

A key component of effective and efficient field operations as well as a flood fighting effort is having dependable equipment to transport the District's heavy equipment from project site to project site. An issue generating considerable discussion throughout the District several months ago in meetings relative to a "special assessment" was the proposal by the District to purchase a new lowboy to replace the District's current unit. The Trail King lowboy we now have was purchased new in 1992. The deck is 10' wide, but it is also equipped with outriggers



to widen the deck to nearly 12', which is necessary for transporting our largest excavator. The four axle trailer and four axle tractor are also required for the District to haul equipment as heavy as 60 tons, the approximate weight of the Sny's Cat 350L long reach excavator. In the last few weeks, it

has become increasingly more evident that the useful life of this lowboy is nearing an end. Repairs have been made enabling the District to transport equipment safely, but the general condition of the unit makes it more and more obvious that repairs in the future may amount to a waste of money. Feedback from local repair shops dealing in repairs of this type have moved the District to begin looking at options for purchasing either a used unit or perhaps a new one. If it comes to purchasing a new unit, we have been told the waiting period for delivery can be as much as eight months. In the meantime, we are making every effort to

locate a good, used lowboy meeting the specifications required to transport equipment weighing as much as 60 ton.

FEDERAL REGULATIONS INSPECTIONS/CERTIFICATION

In the aftermath of Hurricanes Katrina and Rita that pummeled the Gulf Coast in August and September, 2005, the burden of meeting design standards on flood protection systems sponsored by local levee and drainage districts has steadily increased. In effect, the Federal Government is handing down regulations for levee maintenance, upkeep, construction and operation in a “one size fits all” manner. The standards for levees here in west central Illinois are likened to the same standards for levees in Dallas, Texas; Sacramento, California; New Orleans, Louisiana or anywhere else in the country. Living up to these standards is a precursor for retaining our 100-year flood protection designation, which is critical to the future of the Sny. We have met the Federally mandated schedule for submitting engineering data supporting our 100-year flood protection status to FEMA for its review. We are currently awaiting the outcome of that review.

In the meantime the frequency, intensity and sensitivity to following Federal standards during levee inspections has met new highs. Historically, local levee and drainage district sponsors have undergone “annual” inspections, usually in November each year. Inspection teams took anywhere from 3 ½ to 4 days to inspect river, diversion channel and creek levees, pump stations and Federal sedimentation basins in the Sny. Within a few weeks of the completion of the inspection, a full report of the team’s findings was presented to the District. The District then had two years to correct any perceived deficiencies.



**Rock Island Corps Staff Inspecting
the Pleasant Hill “V” Aqueduct Inlet.**

Now, in addition to the “annual inspections” conducted by the Rock Island District staff, we also go through what are referred to as “periodic inspections”. These inspections are much more intense in nature and usually conducted by consultants under retainer by the Corps. In March of

15' Buffer Acceptable, but rating
Unacceptable due to Ruts from Traffic



2011, the Sny underwent its first “periodic inspection” when the Pleasant Hill “V” was reviewed by a team of four individuals who took about two days to walk the levee. A couple of weeks ago, a set of inspectors went through Pump Stations 1 & 3A. A short time thereafter, Reaches 1, 2 & 3 along with the accompanying diversion channel levees underwent a periodic inspection. Two teams of four inspectors each walked these levees to

review their condition. This phase of the process took about two weeks. During this process, one particular issue that stood out as a problem was the concept of levee encroachment. The Corps has been enforcing a standard that calls for a 15' buffer zone of acceptable vegetation between crop land and the levee toes. Throughout the history of the Sny, this area has been farmed. The Sny has approximately 90 miles of Federal levees. This computes to about 165 acres of land that's taken out of production. It also means the Sny District would have the added expense of mowing these areas. In addition, these 15' buffer zones create roadways for those who have less than acceptable intentions to drive throughout remote areas of the District undetected during crop season. Sny representatives have personally met with officials at Corps headquarters in Washington, D.C. about this issue as well as with Congressmen and Senators from the states of Illinois, Missouri and Iowa. Calls have also been placed to officials at the Corps' Rock Island

Unacceptable – Farmed too close to
Levee Toe.



District Office to express concerns about this issue. To date, we are reviewing the Corps' “vegetation variance” program to see if it offers a remedy. In the meantime, please refrain from farming close to the levee toe until we are able to resolve the matter. If you have questions or concerns, please contact the Sny Business Office.



Basin Toe Restored

Other factors weighing heavily on certification were proper maintenance of the levee toes to repair wave-wash as well as maintain a uniform elevation of the levees throughout their length. Wave wash problems were experienced on the basin side toe of the Pigeon Creek Basin outlet as well as the creek side toe of the Reach 1 side of the Hadley McCraney Diversion Channel at its downstream end. Levee cross-sections in these areas were lost due to the constant wave action of water washing against them. With the onset

of the dry weather this year, these areas were regraded, seeded and straw mulched.

In collecting engineering data for submittal on the District's levee certification documents, we found a couple of "dips" on the Reach 3 side of the Six Mile Creek levee downstream of the Kansas City Southern Railroad creek



Turf on Basin Slopes Restored



Six Mile Creek Elevation and Turf Restored

bridge west of Pleasant Hill. One of the sections was restored by Sny crews with the other done by Jack Buchanan. Upon restoring the appropriate elevations, the levee tops were seeded and straw mulched. Some timely rainfall allowed for the restoration of good turf cover in these areas.

15th SPECIAL ASSESSMENT

For the last year and a half, the District has been working through a re-assessment process for what is being termed as the “15th Special Assessment”. (Hard to believe there have been 14 of these in the past.) In July ,2011, the Commissioners petitioned the Circuit Court of the 8th Judicial Circuit for permission to assess and collect up to \$5,853,916.09. This money would be used to repay funds borrowed to complete levee maintenance projects to meet revised 100-year flood protection certification standards, make necessary pump station repairs and make up annual operating deficits resulting from the 2008 flood fight and excessive pumping costs from 2008 thru 2011 including financing costs. The first phase of the process involved asking for the Court’s approval to assess the appropriate amount of money to meet financial needs outlined in the petition. Judge Diane Lagoski conducted a hearing on the petition on October 25, 2011. As a result of information and testimony offered at the hearing, Judge Lagoski ruled in favor of the Sny’s petition. The second phase of the process is the preparation of the assessment roll to include calculation of benefits on each parcel in the drainage district from the work outlined above so the appropriate assessment can be levied. As a result of issues evolving from the increase in the District’s annual maintenance assessment in 2008, it was necessary to retain consultants to properly develop and document the methodology used to calculate the benefits derived and thus the per parcel assessment. This process has been ongoing since the Court’s December, 2011 ruling. It is anticipated that the assessment roll will be ready for filing in late December of 2012 or January of 2013. In any event, the landowners of the District will receive a written notice of the filing along with other information relative to Court hearing dates. We truly appreciate your patience as we continue to move through this tedious process.



The Holiday Season:

The magic that is the Christmas Season is upon us. The anticipation of the New Year is quick to follow. Please note that the Sny Business Office will observe the coming holiday season by closing on December 24, 25 and 31 along with January 1. All the very best to you and yours!

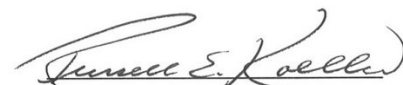
If you would like to access this year’s as well as previous newsletters electronically, they can be found at www.snyisland.org/newsletters.htm

SNY ISLAND LEVEE DRAINAGE DISTRICT
STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCE -
BUDGET AND ACTUAL - ANNUAL MAINTENANCE FUND
YEAR ENDED OCTOBER 31, 2011

	Original/ Final Budget	Actual	Variance- Positive (Negative)
Budgetary Fund Balance, November 1, 2010	\$ (2 764 396)	\$ (2 764 396)	\$ -
Resources (Inflows)			
Annual maintenance assessments	2 042 928	1 863 731	(179 197)
Charges for Services			-
Materials and pipe sales	58 190	96 140	37 950
Hunting lease and farm income	54 230	54 780	550
Investment income		4 050	4 050
Disaster income - FEMA		86 176	86 176
Other	7 033	40 163	33 130
Loan proceeds	-	2 149 832	2 149 832
Amount Available for Appropriation	<u>(602 015)</u>	<u>1 530 476</u>	<u>2 132 491</u>
Charges to Appropriations (Outflows)			
<i>Current</i>			
General Government			
Administrative office	272 337	288 590	(16 253)
Office of the board	124 421	363 164	(238 743)
Flood		1 910	(1 910)
Heavy equipment	213 448	305 327	(91 879)
Levee & Ditch maintenance	26 316	1 219 215	(1 192 899)
Pump Stations	1 167 653	1 614 819	(447 166)
Shop	116 859	274 790	(157 931)
Payroll taxes and benefits	61 089	72 417	(11 328)
Material and pipe sales	50 164	81 401	(31 237)
<i>Debt Service</i>			-
Principal	64 277	64 277	-
Interest	14 463	68 241	(53 778)
<i>Capital Outlay</i>			-
Total Charges to Appropriations	<u>2 111 027</u>	<u>4 354 151</u>	<u>(2 243 124)</u>
Budgetary Fund Balance, October 31, 2011	<u>\$ (2 713 042)</u>	<u>\$ (2 823 675)</u>	<u>\$ 4 375 615</u>

The information above presents a statement of revenue and expenditures for the fiscal year ending October 31, 2011


 Brady Borrowman – President


 Russell Koeller – Secretary


 Dan Lundberg - Commissioner