

ROCK ISLAND DISTRICT DREDGING UPDATE

Jon Klingman
February 2020



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OUTLINE

Staff

Miss

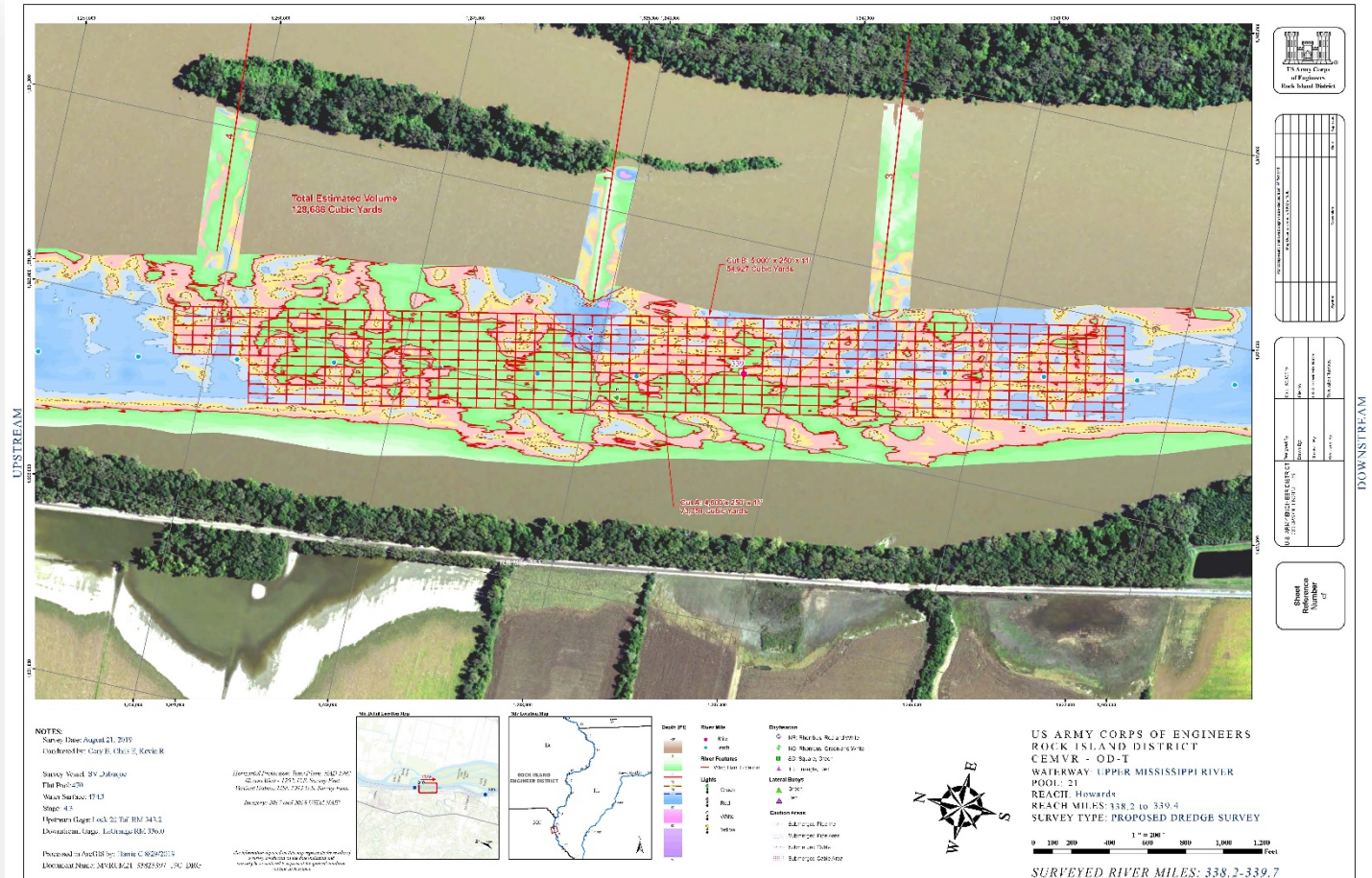
- 2019 Summary
- 2020 Dredging Projections
- Ongoing DMMP / CARS
- Upcoming DMMP / CARS

IWW

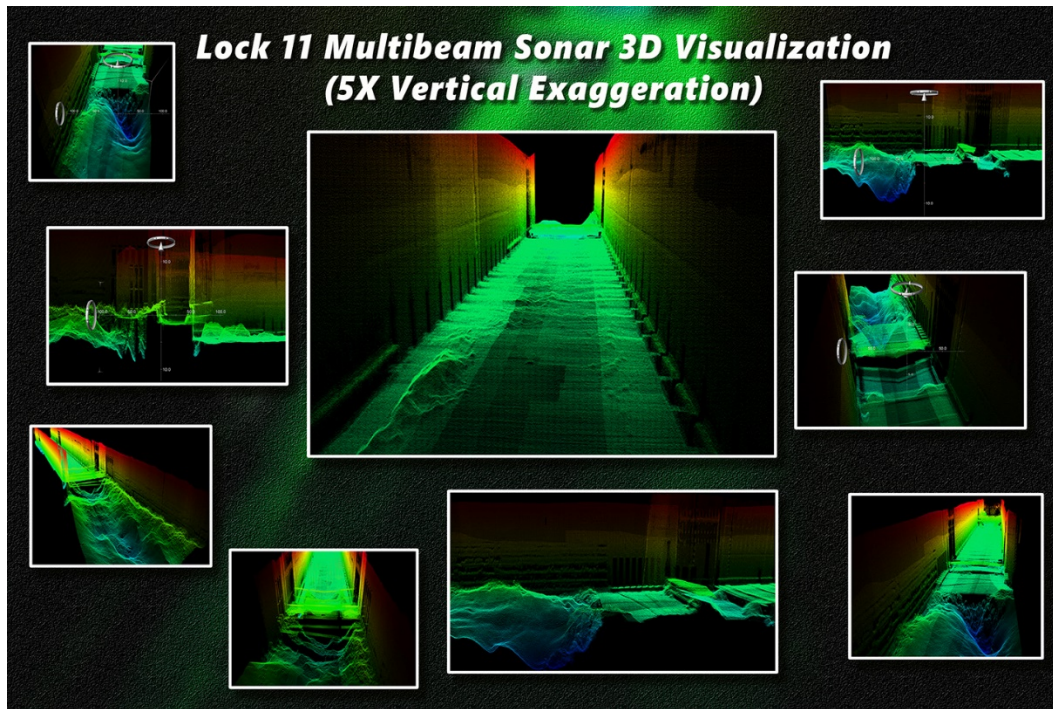
- 2019 Summary
- 2020 Dredging Projections
- Ongoing DMMP Acquisitions
- Upcoming DMMP efforts

OTHER

- Grounding Reports
- New Vessel
- District Realignment



CHANNEL MAINTENANCE STAFF



Jon Klingman - Chief, Channel Maintenance Section

Matt Afflerbaugh - Channel Maintenance Coordinator
(NEPA compliance, Permits)

Matt Martin – Dredging Coordinator, Mississippi River

Chris Reger - Dredging Coordinator, Illinois River

Hydro Survey

Jimmy Maher – Supervisory Eng. Tech

Cory Brenner - Lead Operator SV Dubuque

Vacant - Lead Operator SV Clark

Vacant - Lead Operator SV Coot II

Chris Engelstad – Eng Tech.

Ryan Harmon – Eng Tech.

Vacant (2) – Eng Tech.

Project Management – Bre Popkin (Project Support
Section) DMMP and CARS Coordination



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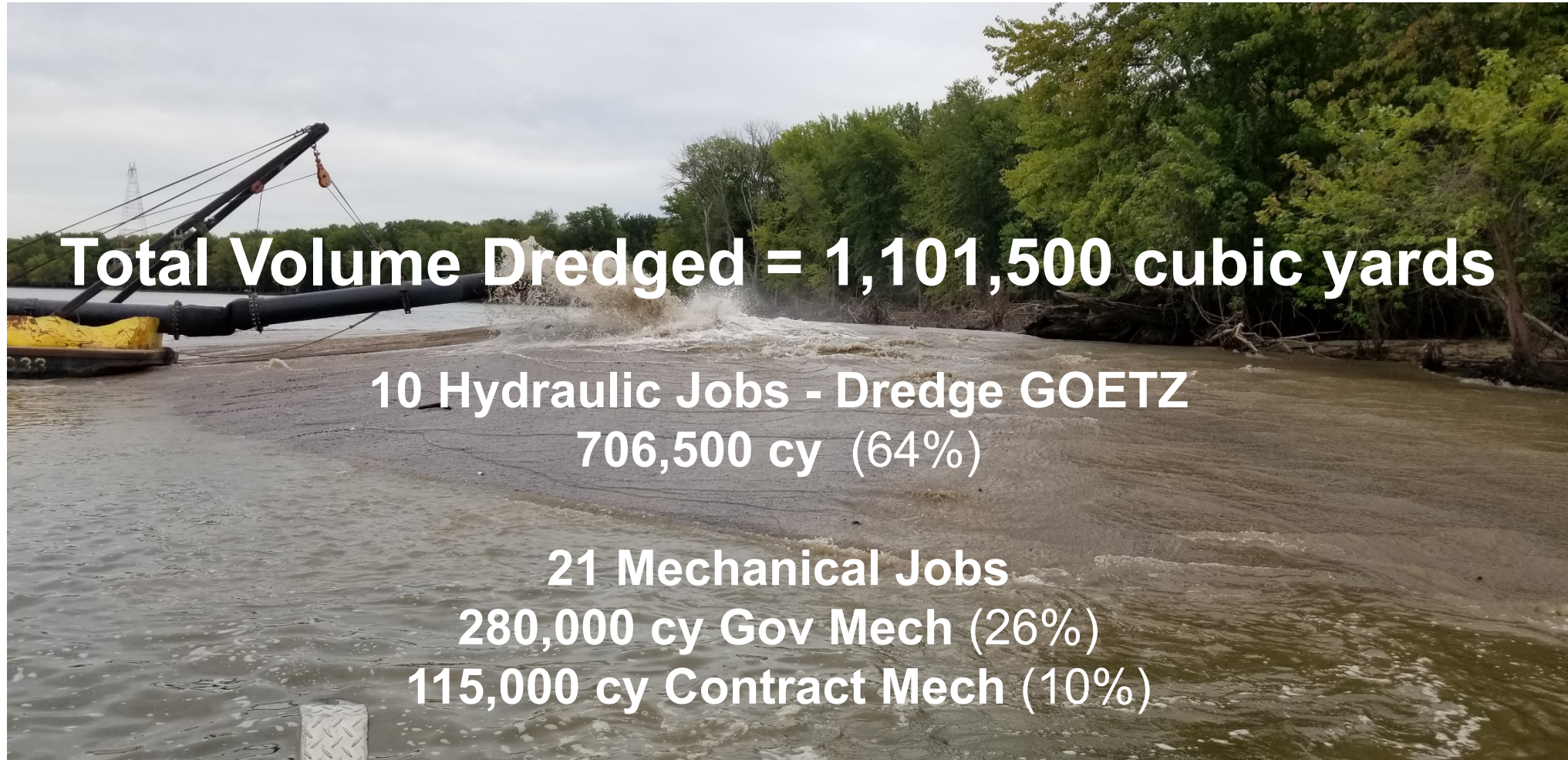
MISSISSIPPI RIVER



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FY 2019 DREDGING SUMMARY – MISS RIVER



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2019 DREDGING - MISS RIVER

2019 Dredging Jobs 18-Nov											
DREDGING COMPLETE	Pool	Riv Mile	Name	Survey Date	Total Quantity	Min Dredging Required To Pass Traffic	Current Stage	7-day Stage	7-day Change	Depth at Minimum Pool Elev.	Current Actual Depth
	11	596.3	Finley's	3-Oct	31,000	31,000	5.6	4.2	-1.3	11.0	16.6
	11	595	Rosebrook	3-Oct	19,000	10,000	5.2	3.9	-1.3	11.0	16.2
	12	562	Island 241	12-Sep	43,000	NA	6.0	4.6	-1.4	11.0	17.0
	13	530	Smith Bay	26-Jul	35,000	22,000	4.8	3.2	-1.6	11.0	15.8
	14	504.2	Cordova (Steamboat)	21-Oct	88,500	30,000	4.9	4.3	-0.6	11.0	15.9
	16	482.6	Lock 15 Lower	8-Aug	24,000	24,000	14.7	12.5	-2.2	11.0	25.7
	16	482.2	Crescent Bridge	16-Jul	147,000	130,000	14.6	12.4	-2.2	11.0	25.6
	16	476.1	Linwood	3-Sep	81,800	50,000	12.6	10.4	-2.2	11.0	23.6
	16	473	Buffalo Upper	5-Aug	42,800	25,000	11.6	9.3	-2.2	11.0	22.6
	16	472.1	Buffalo Lower	5-Aug	69,200	37,000	11.2	9.0	-2.2	11.0	22.2
	17	448	Bass Island	3-Oct	40,000	25,000	12.2	10.0	-2.2	11.0	23.2
	18	427	Keithsburg	16-Sep	48,000	48,000	11.8	10.0	-1.8	11.0	22.8
	18	424.4	Cherokee	1-Oct	47,600	32,000	10.6	8.9	-1.8	11.0	21.6
	18	414.8	Oquawka Bend	18-Sep	50,500	NA	6.3	4.6	-1.7	11.0	17.3
	18	413.5	Furnal Island Light	23-Oct	34,000	NA	5.7	4.0	-1.6	11.0	16.7
	21	338.5	Howard's	3-Sep	158,000	120,000	9.4	7.7	-1.7	11.0	20.4
	Pilot Channel	13	529.1	Elk River	25-Sep	80,000	NA	4.5	2.9	-1.6	11.0
14		494	Lock 14 Upper	12-Sep	19,800	11,000	0.3	0.3	0.0	11.0	11.3
16		469.3	Montpelier	29-Aug	32,200	32,200	10.3	8.1	-2.2	11.0	21.3
19		397	Burlington Island Light (Kemp's)	2-Oct	38,500	25,000	9.8	8.4	-1.4	11.0	20.8
21		332	Hogback/Lonetree	4-Sep	25,000	NA	10.8	9.1	-1.7	11.0	21.8
	14	510	Marias Dosier	30-Sep	9125.0	9,125	7.4	6.5	-0.9	7.3	14.7
	17	446.3	Barkis Island	10-Oct	37,800	37,800	11.7	9.5	-2.1	6.9	18.6
	19	406	Baby Rush Island	9-Sep	40,000	25,000	12.5	10.8	-1.8	6.9	19.4
	19	389.7	Green Bay Landing	14-Aug	125,000	NA	7.6	6.6	-1.1	7.7	15.3
	21	336.3	LaGrange	3-Sep	50,000	20,000	7.9	6.2	-1.7	7.6	15.5
	22	306.3	Cave Hollow	18-Sep	35,000	8,500	8.9	7.4	-1.5	9.0	17.9
				Total CY	1,420,825						

Dredge Goetz
July 1 to Nov 18

Strike/Contract/MVP
June 16 to Oct 23

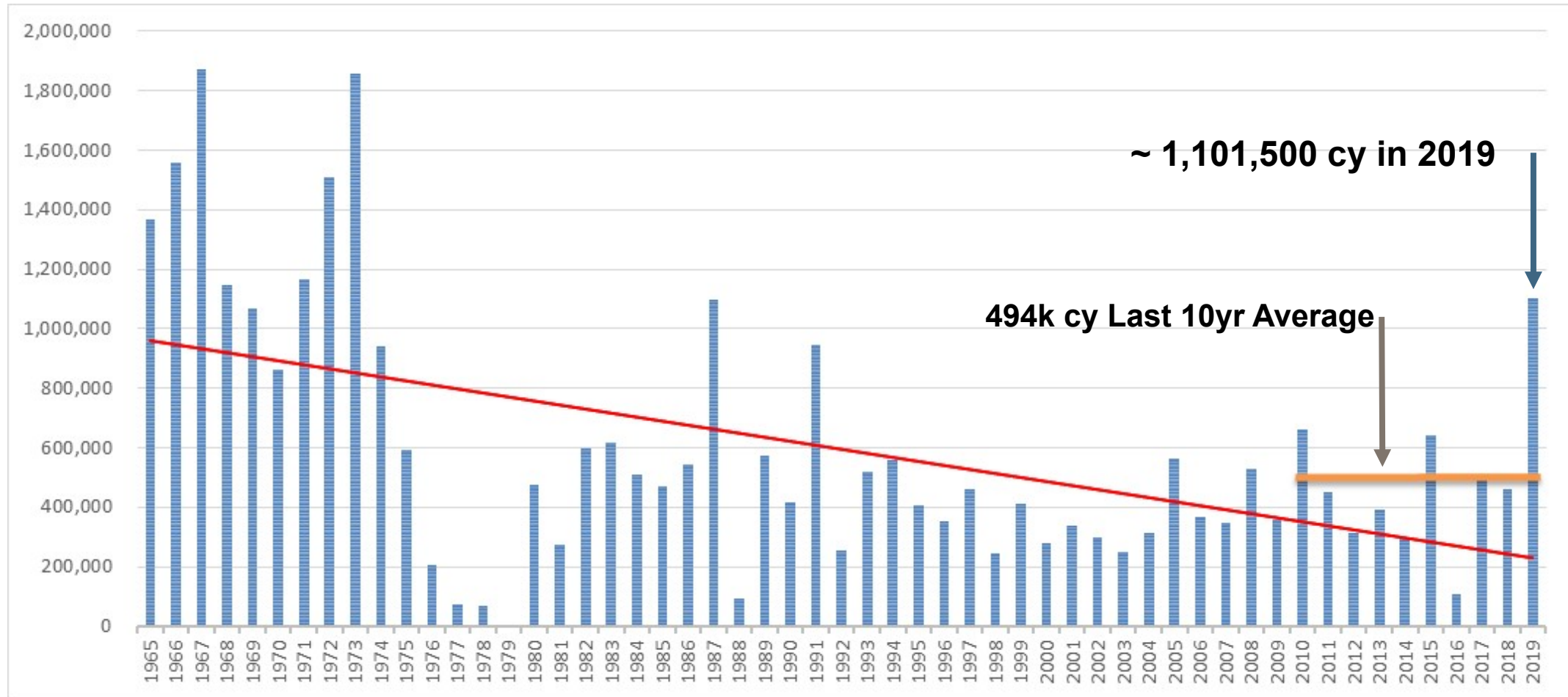
- 28 Dredging Locations identified
- Six Dredge Plants Working Simultaneously
- Emergency Mechanical Contract
- Support from MVP Mechanical
- Five areas pilot channel only
- Six jobs deferred due to continued flooding late in the year



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MISSISSIPPI RIVER HISTORIC DREDGING VOLUMES



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ROCK ISLAND DISTRICT (MVR) - CORPS OF ENGINEERS

2020 Dredging Schedule by Equipment - Upper Missis

9-Jan-20

Pool	Site	River Mile	Dredging Dates Start End	Depth & Est. Quantity	Equip	Placement Site	Placement Type	Dredging Notice #	Job Order #	Cat. ^
Scheduled Dredging Jobs (List will change after Spring Surveys)										
11	Finley's Landing	596.0-596.5		11 80,000	GH	Bathtub 594.1L	Upland DMMP Site			I
11	Rosebrook	594.5-595.3		11 25,000	GM	Bathtub Const 594.1L	Upland DMMP Site			R
12	Island 241	561.8-562.1		11 20,000	GM	562.2L	Thalweg			R
12	Bellevue Slough	560.5-560.8		11 20,000	GM	562.2L	Bankline			R
13	Smith Bay	529.9-530.4		11 30,000	GM	Bankline 531.3-531.7L	Bankline			R
13	Elk River	529.1-529.3		11 30,000	GM	Between Islands 527.9R	Upland			R
14	Marais Dosier	509.6-509.9		11 15,000	GM	503.5-504.1R; 503.0	Bankline & Thalweg			R
14	Lock 14 Upper	493.8-494.2		11 10,000	GM	503.5-504.1R; 503.0	Bankline & Thalweg			R
16	Buffalo	472.0-473.0		11 20,000	GM	Buffalo Banklines	Bankline			R
16	Andalusia	471.1-471.4		11 10,000	GM	469.3-469.8L	Bankline			R
16	Montpelier	469.2-469.5		11 15,000	GM	469.3-469.8L	Bankline			R
17	Lock 16 Lower	456.5-456.8		11 15,000	GM	456.2-456.4L	Bankline			R
17	Barkis Island	446.1-446.4		11 40,000	GH	Bass Island DMMP Site 448.0L	Upland DMMP Site			R
18	Willow Bar Island Excav. (off load)	425.5		150,000		Keithsburg Site 4	Upland DMMP Site			N/A
18	Keithsburg Upper	426.7-427.3		11 10,000	GM	425.4-426.0L	Bankline			R
19	Baby Rush Island	405.6-406.2		11 20,000	GM	405.7-406.0L	Bankline			R
19	Kemp's Landing Lwr.	396.9-397.1		11 30,000	GM	Kemps RM 397.8-398.1L	Bankline			R
19	Dallas City	389.3-390.2		11 120,000	GH	TBD	TBD			R
20	Lock 20 Upper	343.5-344.2		11 10,000	GM	343.4-343.7R; 345.0-345.8	Bankline			R
21	Howards Crossing	337.4-340.3		11 60,000	GH	Howard's DMMP Site 338.5R; 339.0-339.5L	Upland DMMP Site & Bankline			I
21	LaGrange	336.1-336.4		11 15,000	GM	336.3R	Bankline			R
21	Hogback/Lonetree	331.5-332.9		11 15,000	GM	331.4-332.3L; 333.6R	Bankline			R
22	Cave Hollow	305.0-305.5		11 150,000	GH	Head of Harris Island 305.5L	Open Water			R

* Currently operating at this job. ** Dredging completed *** Dredging placement requires OSIT approval. Mussel survey may be required for placement sites that have not been used in the past.

Total quantities by equipment:

Government Hydraulic - GOETZ (GH) =	450,000	^E = Emergency
Government Mechanical - (GM) =	310,000	I = Imminent Closure
Contract Hydraulic - (CH) =	0	R = Routine Dredging
Contract Mechanical - (CM) =	0	
Total Dredging =	760,000	
		Deferred Dredging 150,000

INITIAL 2020 MISS RIVER DREDGE PROJECTIONS

Rosebrook/Finley's	595.5-596.5
Smith Bay	530.0
Barkis Island	446.3
Baby Rush	406.0
Howard's	338.7-339.5



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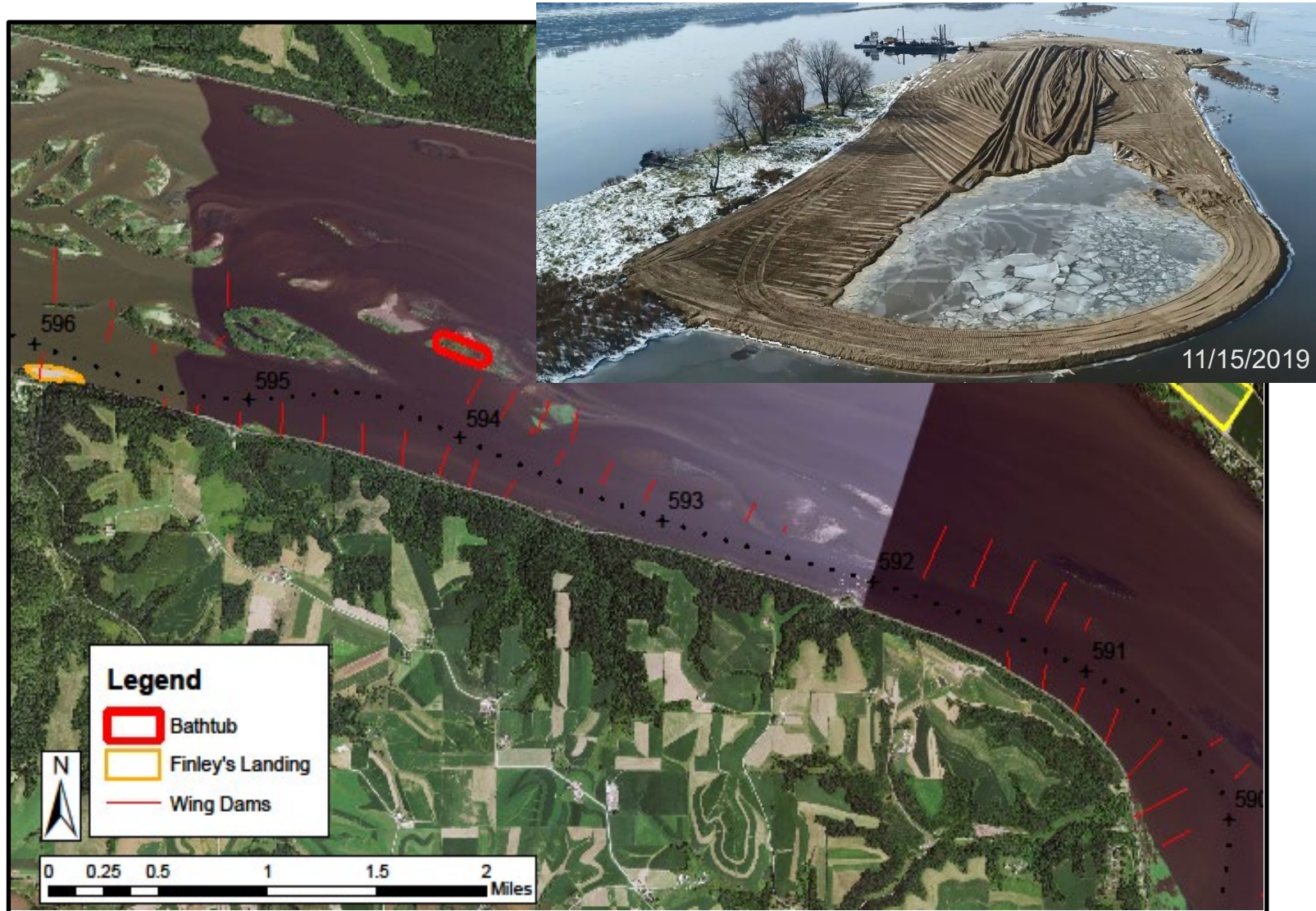
MISSISSIPPI RIVER ONGOING DMMP SITE CONSTRUCTION / CARS



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UMR (POOL 11) 595.0 HURRICANE ISLAND REACH DMMP



Construction:

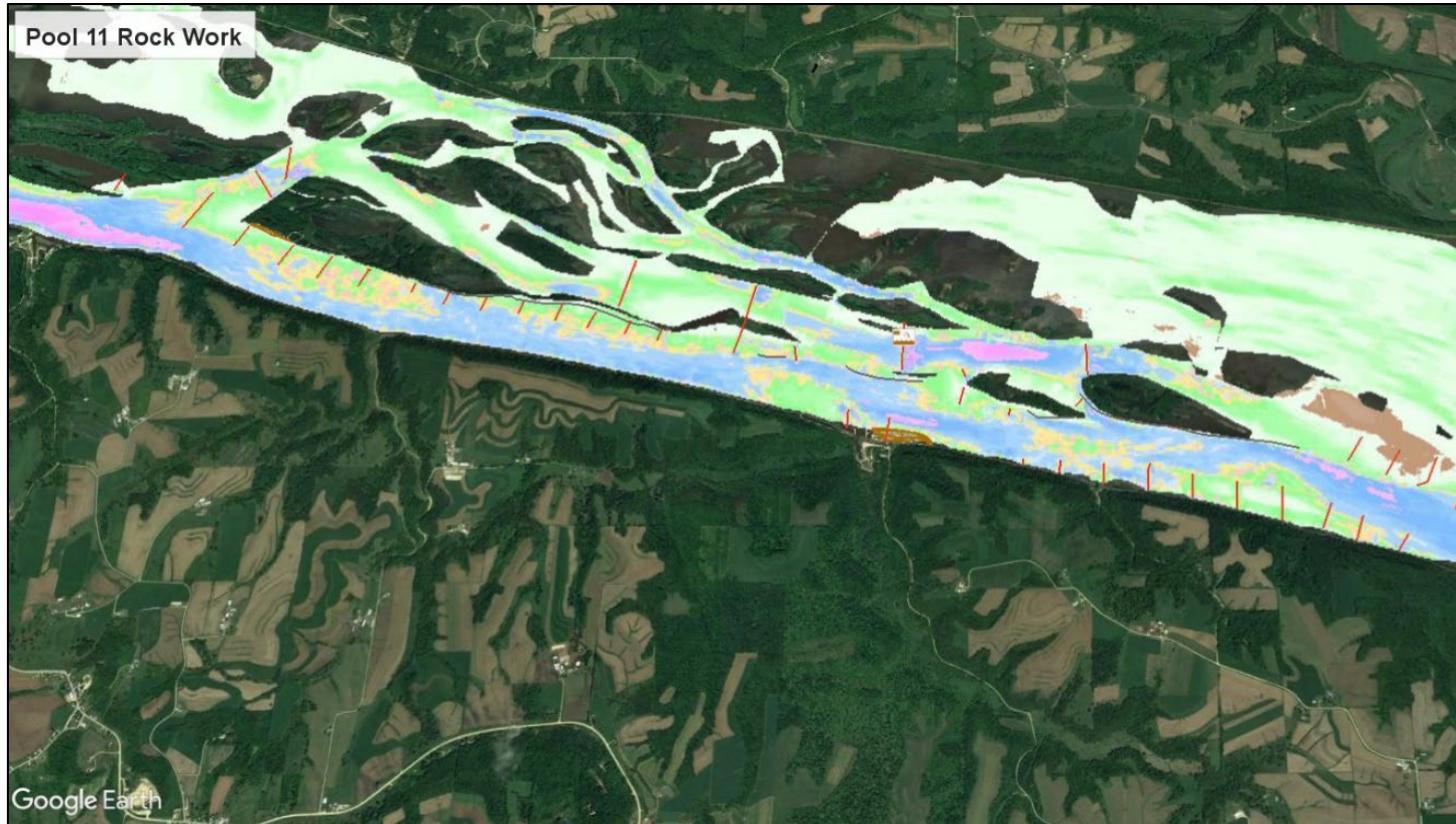
- ~53,000 CY placed in 2019
- OD crews worked into December constructing the pad and berms



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UMR (POOL 11) 595.0 HURRICANE ISLAND REACH ROCK WORK - CARS



- Degraded rock structures not functioning as originally built
- Provide channel stability and reduce shoaling
- H&H analysis of 17 variations
- Next step: Selection of recommended alternative

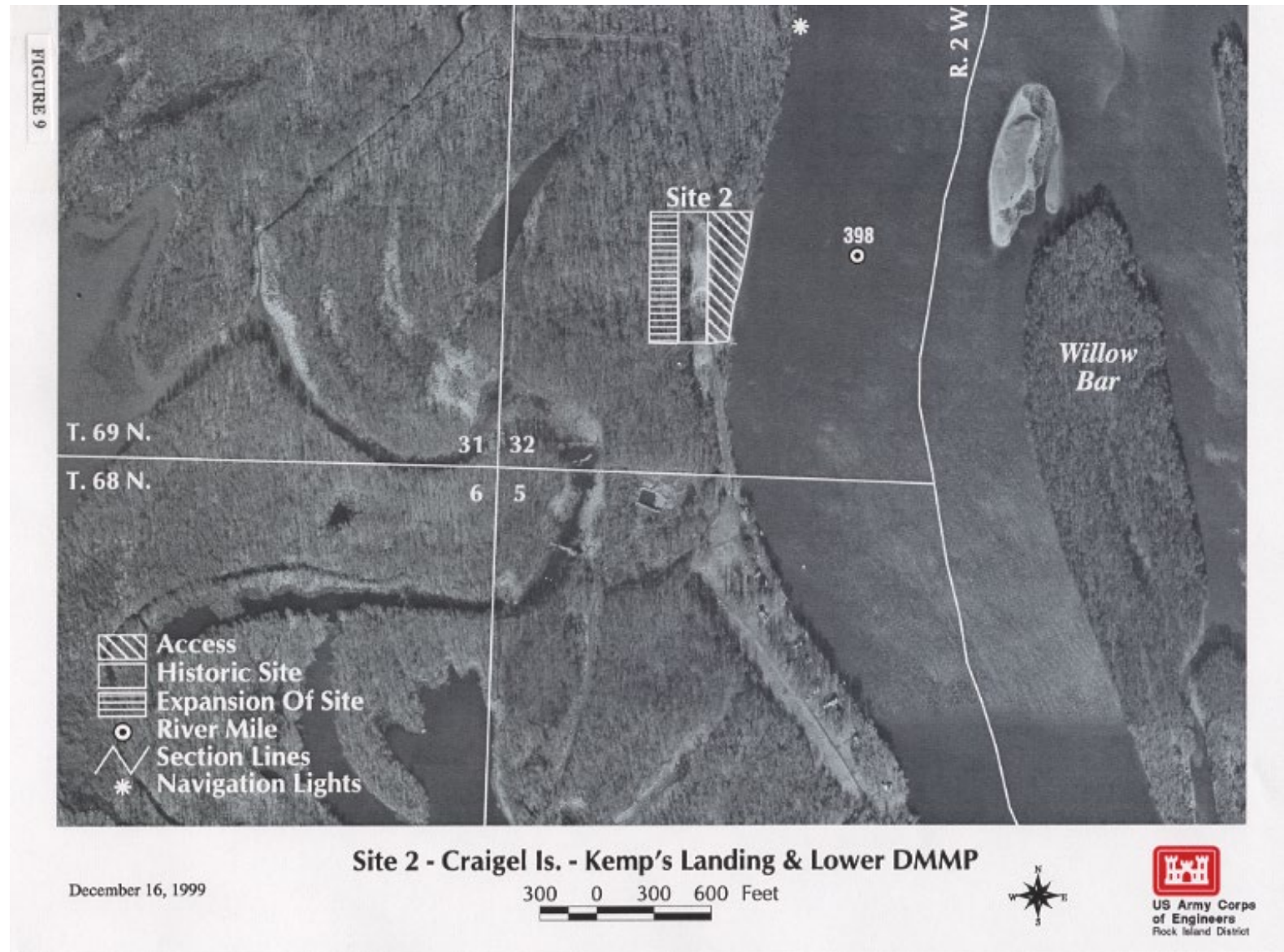


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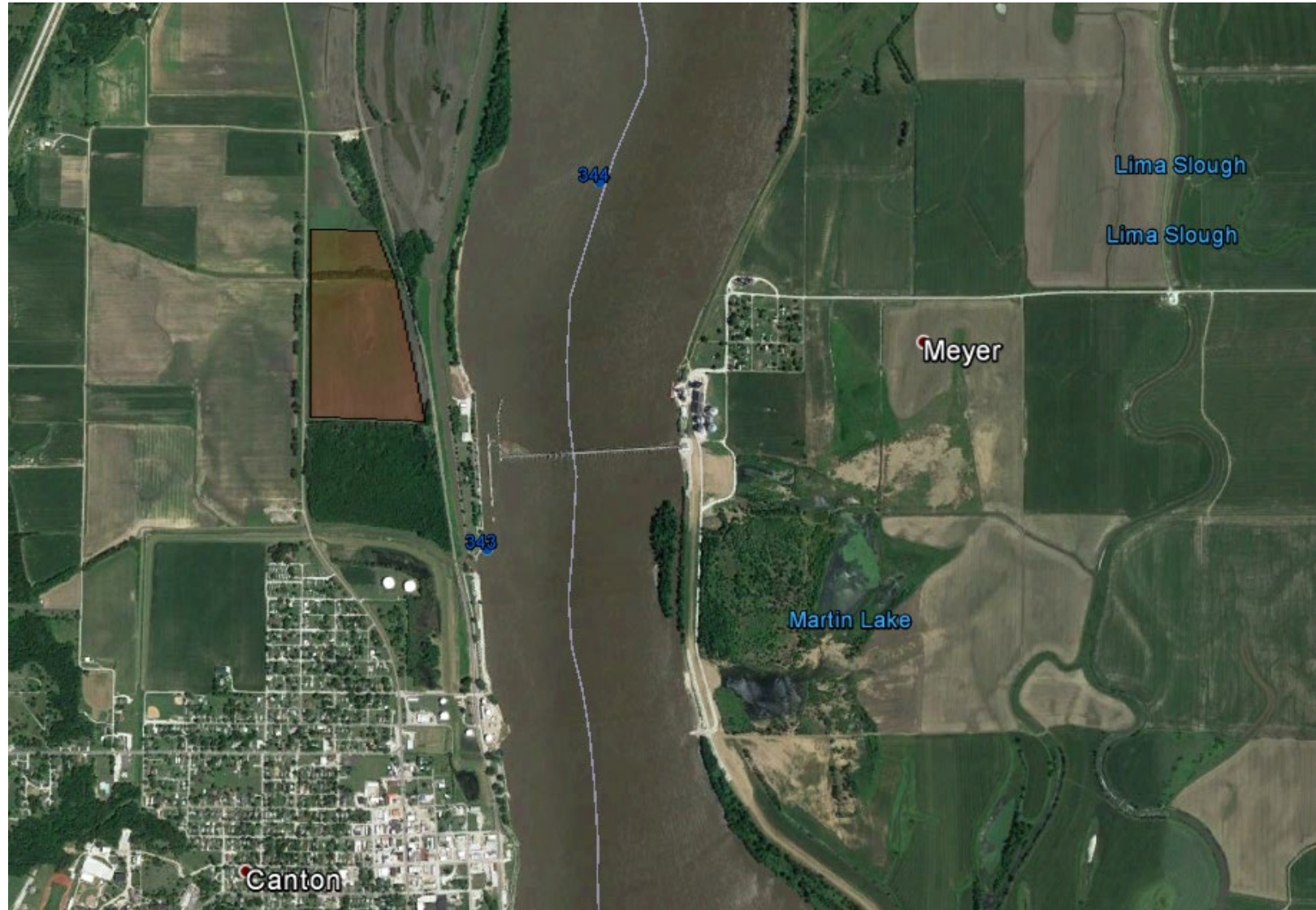
UMR (POOL 19) 398.0 KEMPS-CRAIGEL DMMP

- Timber harvest completed
- Site preparation and construction to be completed by OD-M crews beginning winter 2020

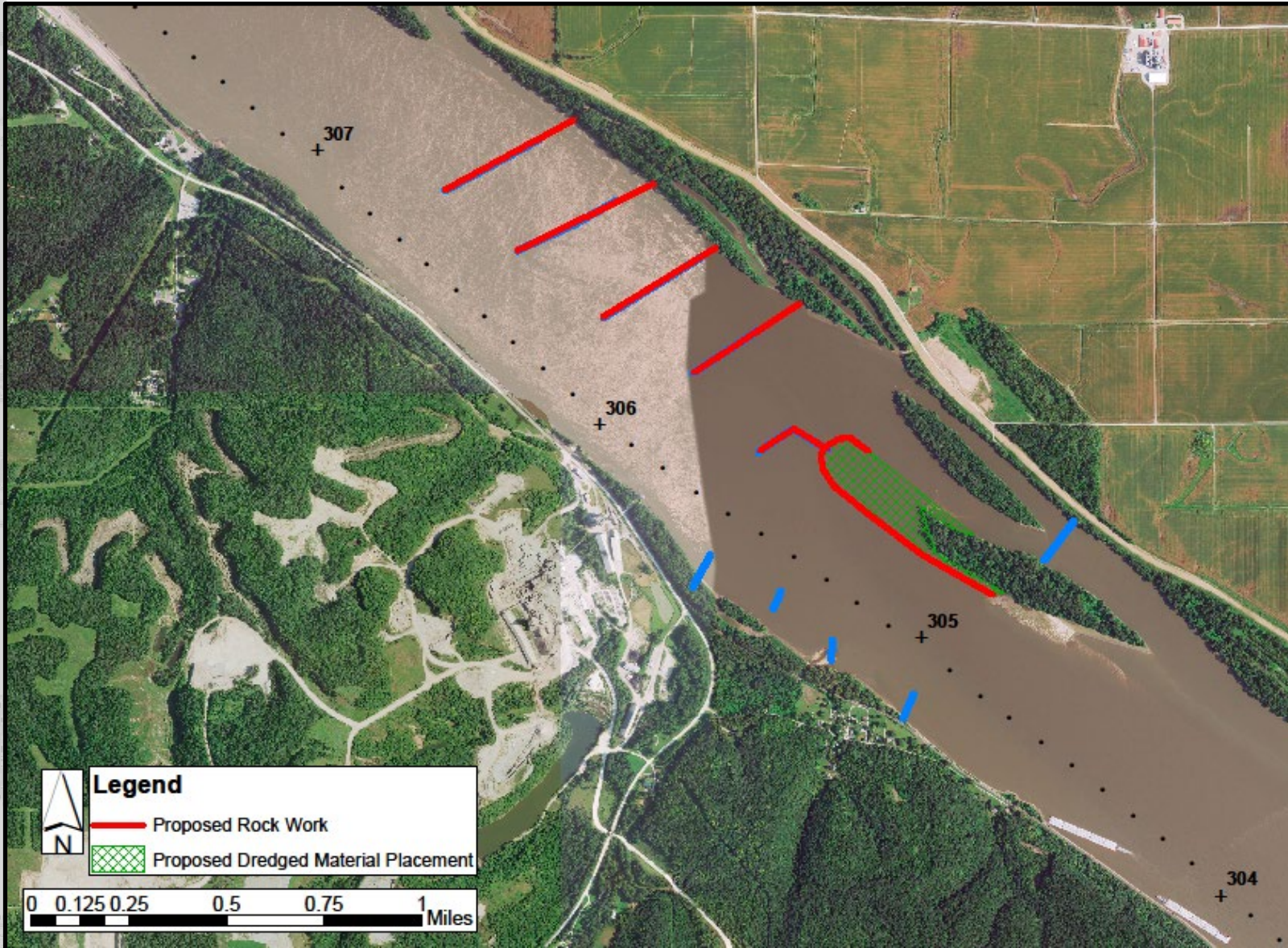


UMR (POOL 20) LOCK #20 UPPER

- Contract likely end of FY20 for Construction of DMMP site
- Site layout for public use of dredged material



UMR (POOL 22) 306.0 CAVE HOLLOW ROCK WORK



Project Features:

- Restore rock at head of Harris Island
- Incrementally restore wing dams 4, 5, and 6 (7 and 8, if needed).
- Harris Island includes ~300,000 cy of dredged material placement

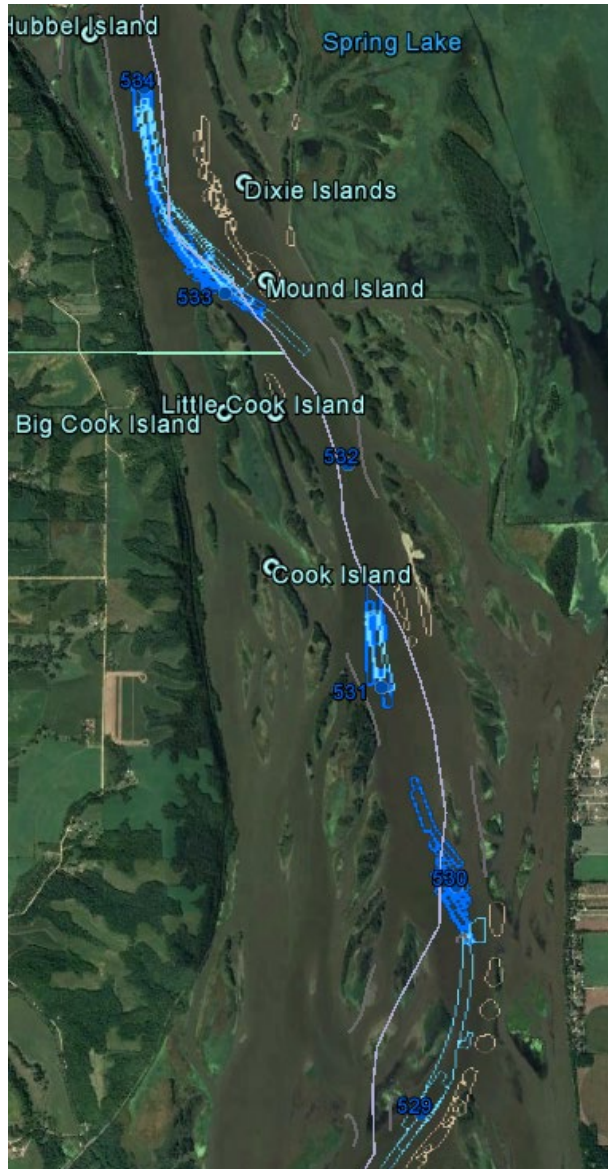
MISSISSIPPI RIVER UPCOMING DMMP/CARS



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UMR (POOL 13) DARK SLOUGH- ROCK WORK



Project Features:

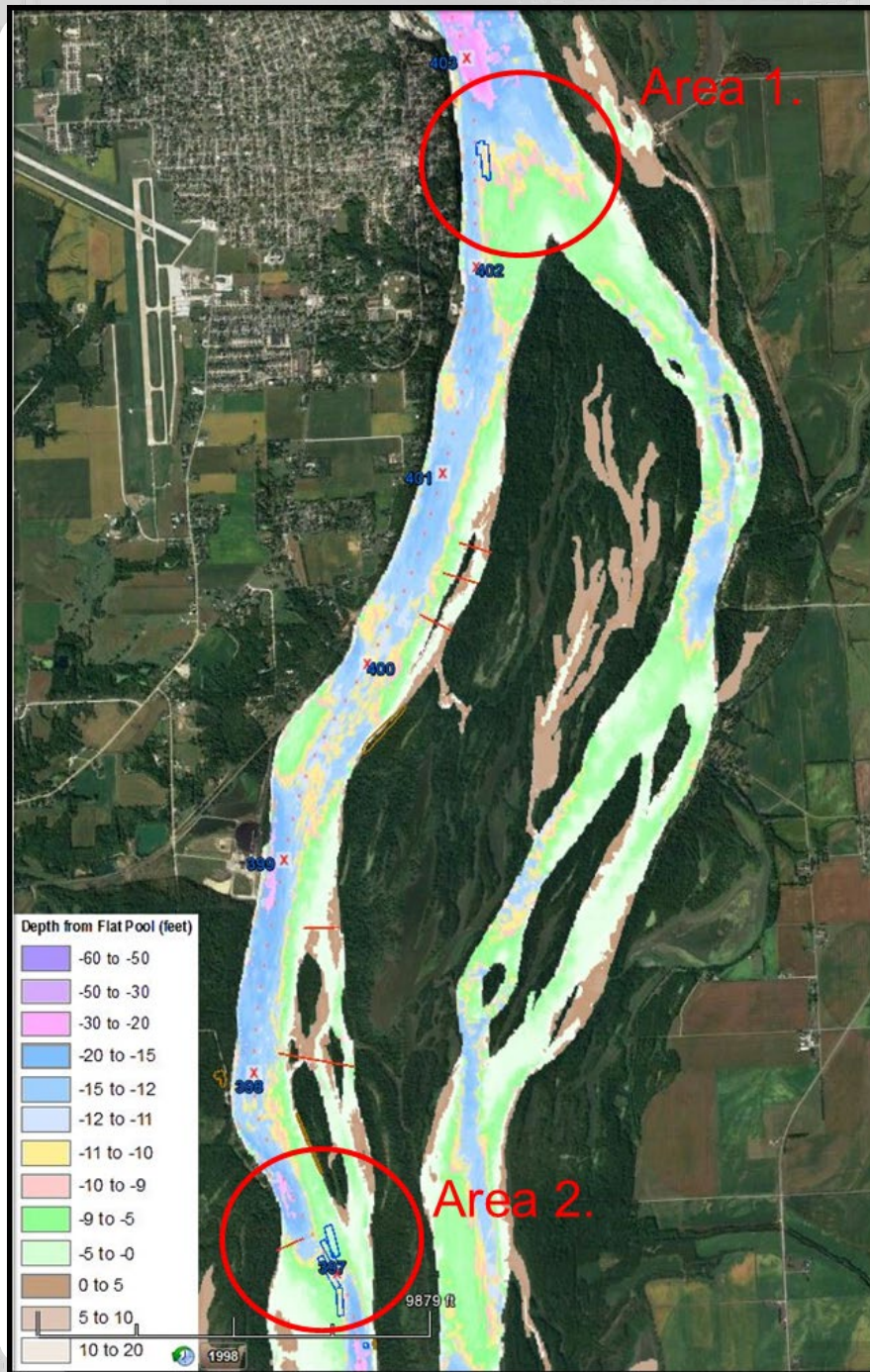
- Areas: Sabula Lower (RM 533), Dark Slough (RM 531), and Smith Bay (RM 530)
- Concern: Increased dredging frequency
- Team will evaluate options:
 - Identify and study problems
 - Potential solutions
 - Restore existing rock structures
 - Modify existing rock structures
 - Build new rock structures
 - Others ideas

UMR (POOL 13) 528.0 CORMORANT ISLAND



- 2019 Dredge Season – opportunity to restore historic island footprint and protect nesting area





UMR POOL 19 - BURLINGTON BLUFF

Project Features:

- Area 1 concerns: primary current shifts from navigation channel to side channel
- Area 2 concerns: sediment migrates across navigation channel, requires increasing dredging quantities & frequencies
- Team will evaluate options:
 - Identify and study problems
 - Potential solutions
 - Restore existing rock structures
 - Modify existing rock structures
 - Build new rock structures
 - Others ideas

ILLINOIS RIVER



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FY 2019 DREDGING SUMMARY – IWW

Total Volume Dredged = 323,000 cubic yards

5 Hydraulic Jobs – Contract *All in Fall of 2018 – 0 Yards in CY 19
211,000 (65%)

6 Mechanical Jobs - Strike Crew
112,000 (35%)



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2019 DREDGING – IWW

Contract Dredge – No Show....

Strike Removal – 7 Feb through 18 Dec

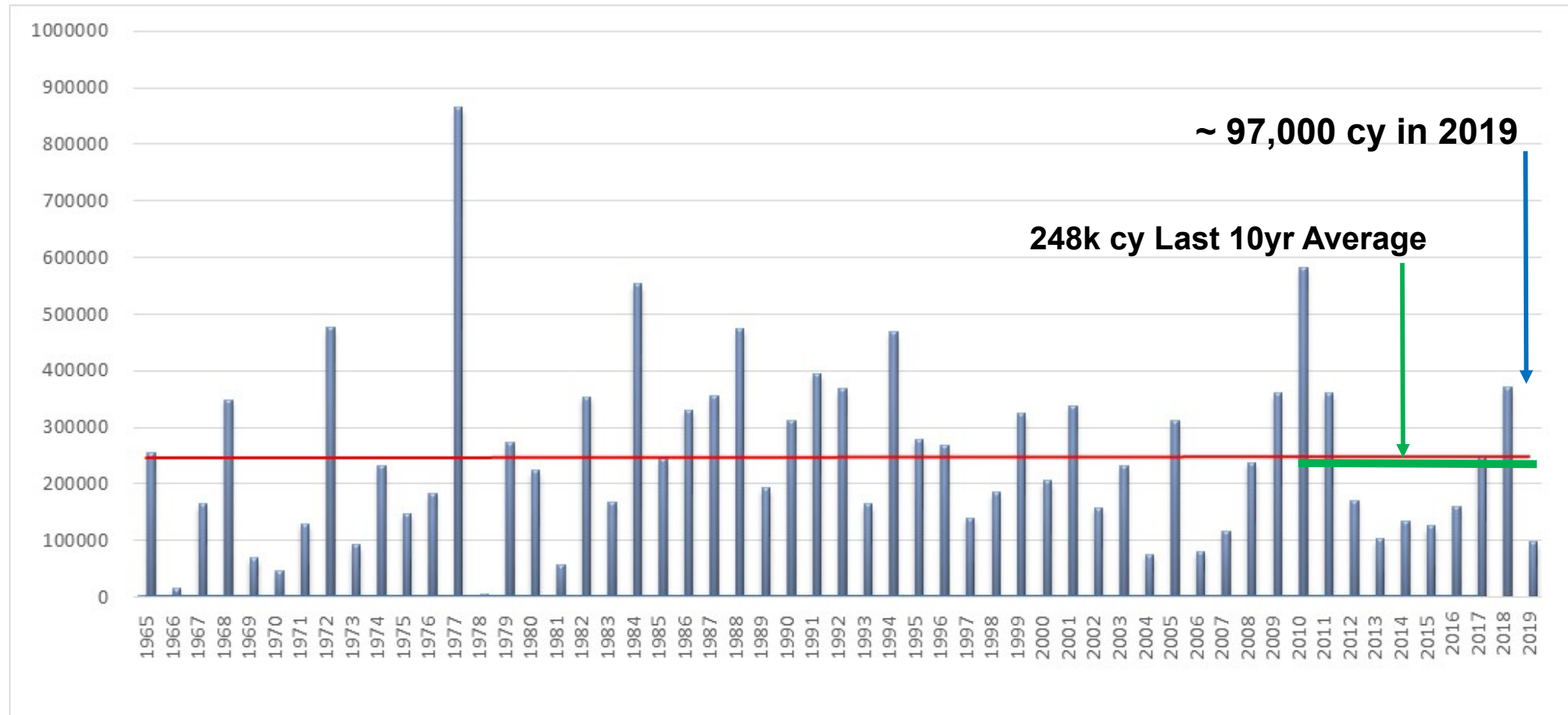
- Delbridge Island, RM 232.3
- Bull's Island, RM 240.1 - 240.7
- Wesley Bend, RM 159.4
- Grist Island, RM 258.7
- Johnson, Island, RM 249.9
- Senachwine Creek, RM 181



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ILLINOIS RIVER HISTORIC DREDGING VOLUMES



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2020 IWW DREDGE SCHEDULE

ROCK ISLAND DISTRICT (MVR) - CORPS OF ENGINEERS 2020 Dredging Schedule by Equipment - Illinois Waterway

9-Jan-20

Pool	Dredge Cut Name	River Mile	Dredging Dates Start End	Depth & Est. Quantity	Equip.	Placement Site	Placement Type	Dredging Notice #	Job Order #	Cat.^
LaGrange	Briggs Landing	83.6-84.1		48,600	CH	84.1-84.9 R	Bankline			R
LaGrange	Beardstown	86.8-88.8		36,000	CH	87.3 L	Upland			R
LaGrange	Anderson Lake Light	108.8-109.4			CH	108.5-111.0 R	Bankline			R
LaGrange	Devils Upper	116.9-117.2			CH	115.3-117.5 L	Bankline			R
LaGrange	Devils Elbow	115.8-116.9		67,844	CH	115.8-116.9 L	Bankline			R
LaGrange	Havana upper/Quiver Island	120.5-121.3			CH	120.2-121.5 R	Bankline			R
LaGrange	Copperas Creek	136.3-136.8		18,135	CH	136.6-137.2 L	Bankline/Upland			R
LaGrange	Mackinaw River	147.7-147.9		21,700	CH	147.0 L	Bankline			R
LaGrange	Pekin Bend (wiggles)	150.4-150.8		159,362	CH	150.0-151.0 R	Bankline/Upland			R
LaGrange	Lick Creek	155.7-156.8		41,827	CH	154.8-155.4 L	Bankline			R
Peoria	Chillicothe	180.4-181.6		31,326	CH	181.6-181.9R	Bankline			R
Peoria	Hennepin Power	212.0-212.9		45,135	CH	214.7-215.8 R	Bankline			R
Peoria	Clark Island	215.4-216.3		15,000	GM	216.0 R	Bankline			R
Peoria	Huse Slough	219.0-221.0		25,000	CH	220.0 R	Bankline			R
Peoria	Starved Rock Lower	230.3-230.9		37,362	GM	228.0 R	Upland			R
Starved Rk	Marseilles Lower	244.2-244.3		6,000	GM	241.7 R	Bankline or Upland			R
Marseilles	Dresden lower	270.7-271.3		16,000	GM	270.5 R	Upland			R

* Currently operating at this job. ** Dredging completed *** Dredging suspended.

Bankline placement requires OSIT approval. Marseilles Pool requires additional endangered

Total quantities by equipment:

Government Hydraulic - (GH) = 0
 Government Mechanical - (GM) = 74,362
 Contract Hydraulic - (CH) = 446,329
 Contract Mechanical - (CM) = 0
 Hydraulic - (H) = 0
 Total Dredging = 520,691

Scheduled 520,691
 Unscheduled 0
 TOTAL 520,691

^E = Emergency
 I = Imminent Closure
 R = Routine Dredging

Dresden Lower	271
Starved Rock Lower	244.3
Hennepin Power	212.0-212.9
Mackinaw River	147.7
Beardstown	86.6-88.8



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ILLINOIS RIVER ONGOING DMMP ACQUISITION



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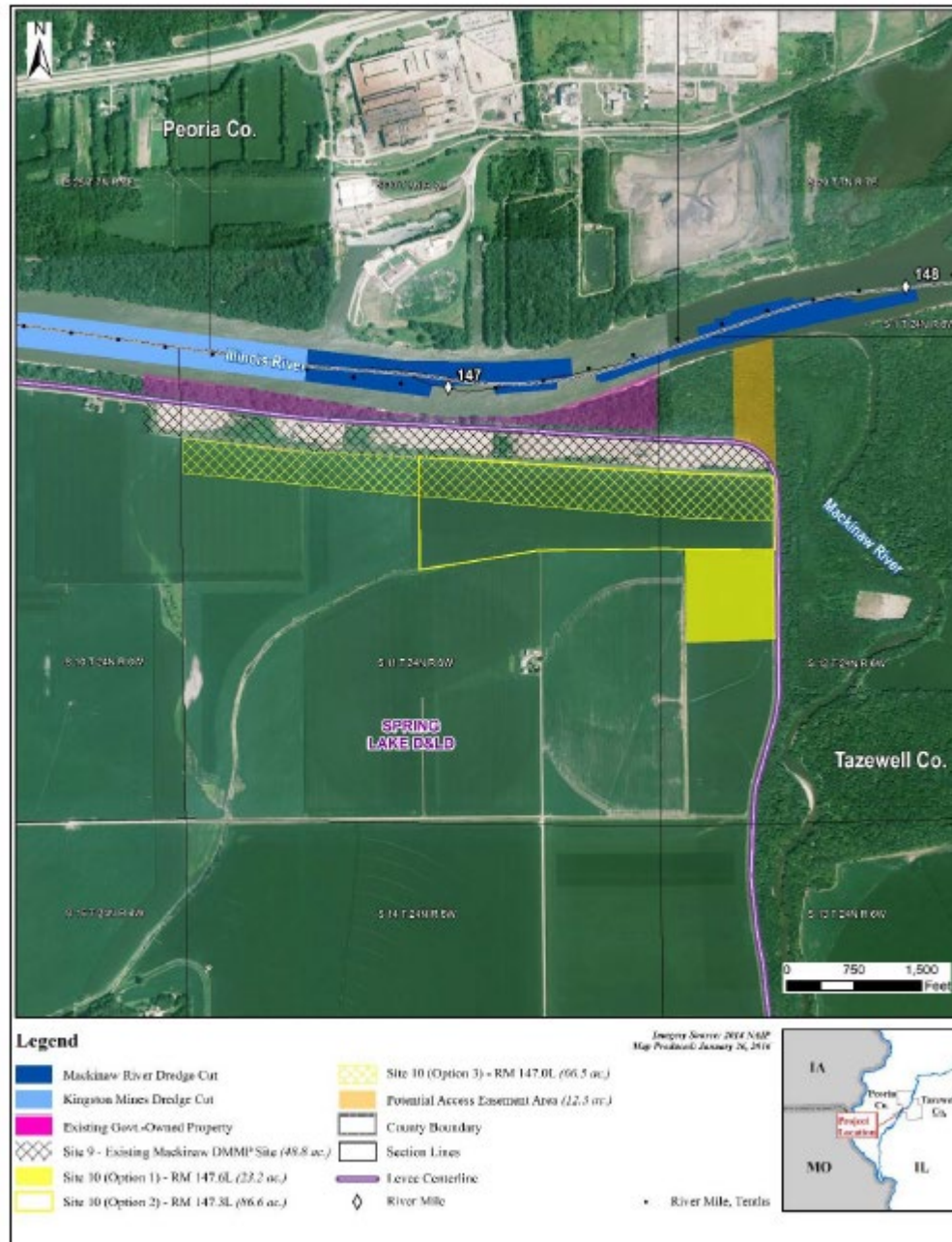
Bull's Island DMMP:

- Anticipated MVD approval March 2020
- Candidate for public use of dredged material
- **Site Acquisition** planned for end of FY20



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Mackinaw River DMMP:

- RE to complete REDM
- MVD approval Spring 2020
- Acquisition planned for end of FY20

ILLINOIS RIVER UPCOMING DMMP EFFORTS



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ILWW - LAGRANGE POOL DMMP



- Pool-scale planning
- Approximately 77.5 RM
- Goal: Adaptable to future conditions
 - Identify potential upland and environmental placement sites
- Inventory of existing conditions



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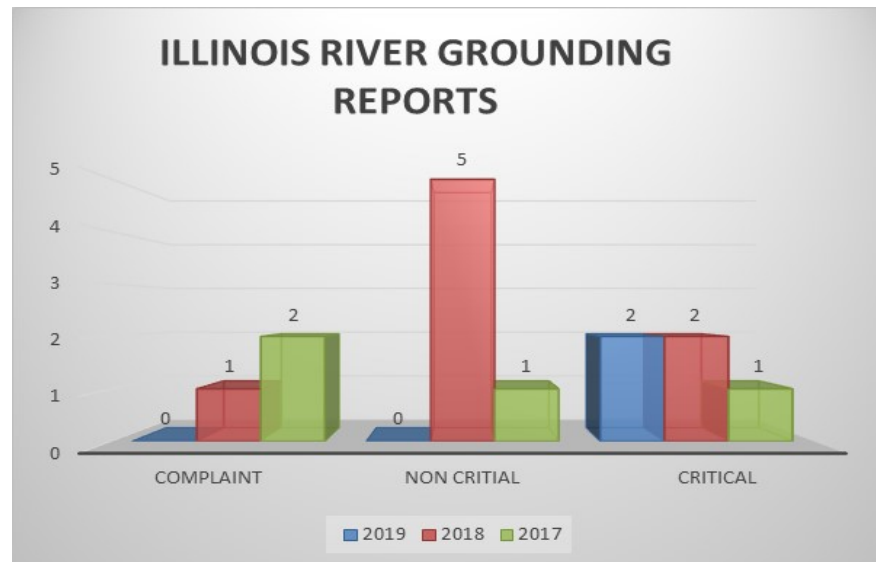
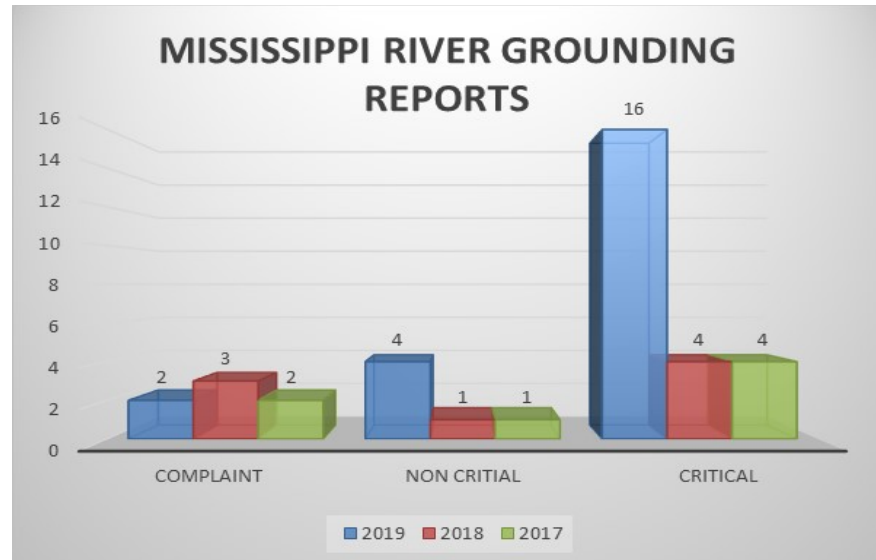
OTHER TOPICS.....



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GROUNDING REPORTS



Report of Navigation Problem			
Send Report To: US Army Corps of Engineers		E-mail: jon.a.klingman@usace.army.mil Fax (309) 794-5180 phone (309) 794-5505 (For Business Hours reporting)	
Category (check one - see attached memo for definitions) ☒ Critical ☐ Non-Critical ☐ Complaint			
Location			
River	Illinois	River Mile	87.0
Pool	LaGrange	Bank	LDB
Date Aground	03/27/2018	Time Aground (HH:MM)	08:00
Date Free	03/27/2018	Time Free (HH:MM)	11:30
Name of Vessel MV GROUNDER			
Loads	12	Empties	3
Draft	9.4	Direction	Upbound
Remarks			
Grounded outside Reds. Helper boat on site.			
Reporting Individual	Klingman	Phone Number	(309) 794-5240
Date (mm/dd/yyyy)	03/27/2018	Coast Guard Notified?	Yes
OD-T Use Only			
Action Taken / Results			
Date/Time Commenced	Date/Time Completed		
Signature	Date		
SUBMIT			



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NEW SAMPLING VESSEL

Clark Boats Contract

- Designed for Sediment Sampling
- 24-foot-long pontoon with through deck moon pool
- 12-foot collapsible “A-Frame” to support a Vibracore drill
- Channel Maintenance and habitat project applications



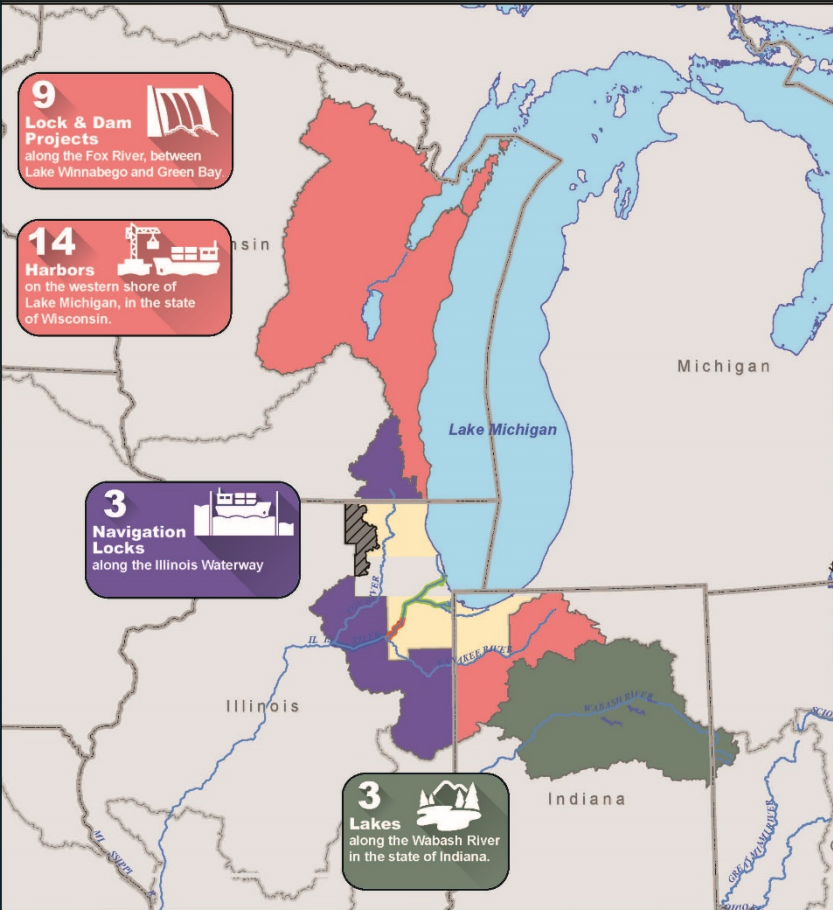
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DISTRICT REALIGNMENT

PROPOSED PLAN

COURSE OF ACTION



BENEFITS

- More dedicated attention for major projects
- Unified aquatic invasive species defense.
- Improved watershed alignment and unity of service.
- Increased leadership capacity.
- Enhanced regional technical competency.

CLOSER TO THE CORPS

- The transfer of work will bring people, projects, and partners closer to the Corps than ever before.**
- District leadership will be closer to those they serve, including concerned citizens and government officials.
 - Field offices & project sites will be closer to centralized mission support.
 - Employees will spend less time on the road and more time on the job.

USACE IS COMMITTED TO OUR PERSONNEL ACROSS ALL DISTRICTS.

NO PROJECTED JOBS LOST

- There are no projected adverse actions, including reduction in force, or changes to or reductions in pay as a result of the realignment.

NO INVOLUNTARY RELOCATIONS

- Certain employees in Illinois, particularly those who work in and around Chicago, will report to Chicago District.
- Employees at MVR district headquarters will remain a part of Rock Island District.
- All employees will maintain their current duty stations and work assignments.

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