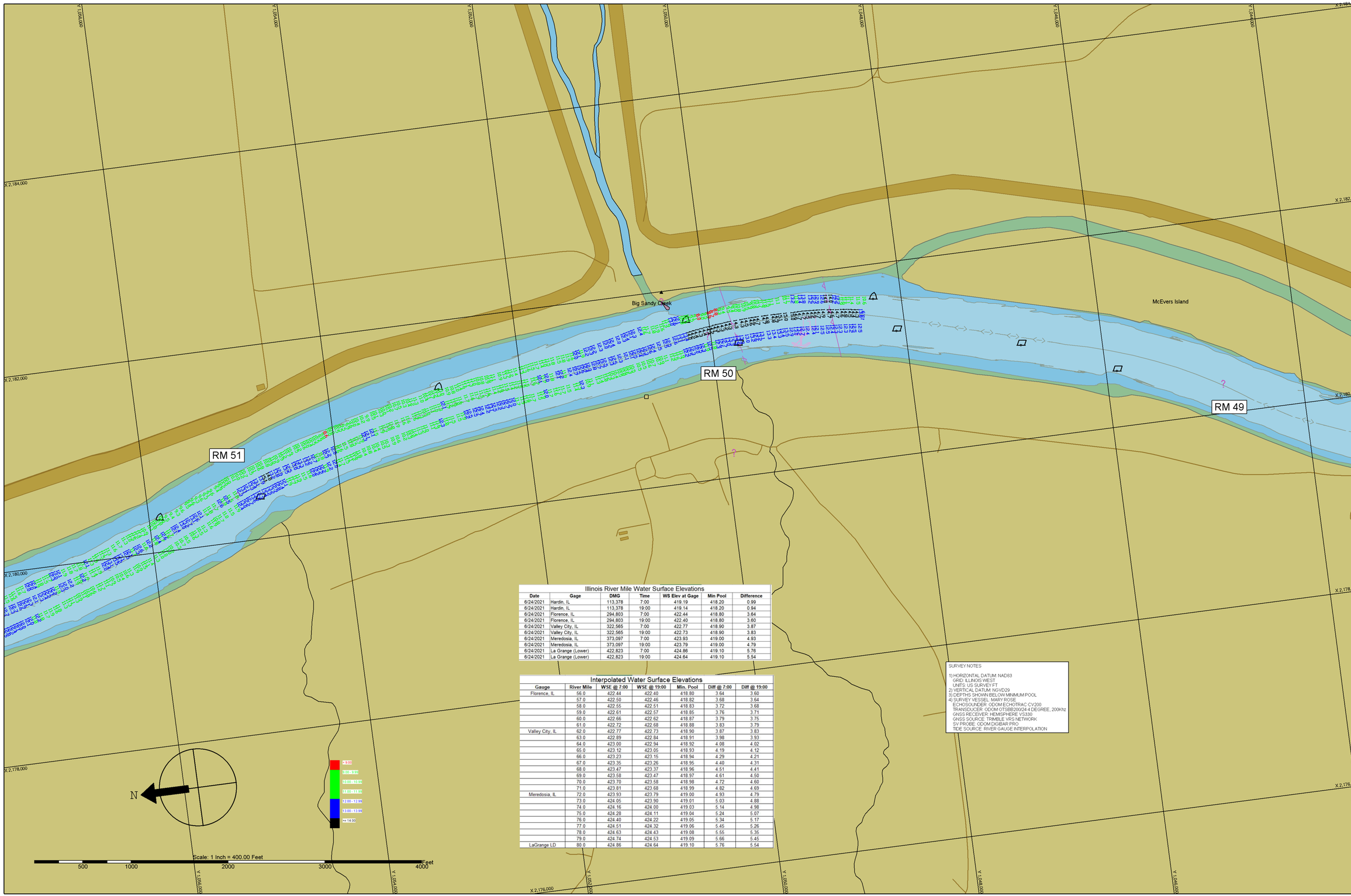



Illinois River Mile Water Surface Elevations

| Date | Gage | DMG | Time | WS Elev at Gage | Min Pool | Difference |
|---|---|---|---|---|---|---|
| 6/24/2021 | Hardin, IL | 113,378 | 7:00 | 419.19 | 418.20 | 0.99 |
| 6/24/2021 | Hardin, IL | 113,378 | 19:00 | 419.14 | 418.20 | 0.94 |
| 6/24/2021 | Florence, IL | 294,803 | 7:00 | 422.44 | 418.80 | 3.64 |
| 6/24/2021 | Florence, IL | 294,803 | 19:00 | 422.40 | 418.80 | 3.60 |
| 6/24/2021 | Valley City, IL | 322,565 | 7:00 | 422.77 | 418.90 | 3.87 |
| 6/24/2021 | Valley City, IL | 322,565 | 19:00 | 422.73 | 418.90 | 3.83 |
| 6/24/2021 | Meredosia, IL | 373,097 | 7:00 | 423.93 | 419.00 | 4.93 |
| 6/24/2021 | Meredosia, IL | 373,097 | 19:00 | 423.79 | 419.00 | 4.79 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 7:00 | 424.86 | 419.10 | 5.76 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 19:00 | 424.64 | 419.10 | 5.54 |

Interpolated Water Surface Elevations

| Gauge | River Mile | WSE @ 7:00 | WSE @ 19:00 | Min. Pool | Diff @ 7:00 | Diff @ 19:00 |
|---|---|---|---|---|---|---|
| Florence, IL | 56.0 | 422.44 | 422.40 | 418.80 | 3.64 | 3.60 |
| | 57.0 | 422.50 | 422.46 | 418.82 | 3.68 | 3.64 |
| | 58.0 | 422.55 | 422.51 | 418.83 | 3.72 | 3.68 |
| | 59.0 | 422.61 | 422.57 | 418.85 | 3.76 | 3.71 |
| | 60.0 | 422.66 | 422.62 | 418.87 | 3.79 | 3.75 |
| | 61.0 | 422.72 | 422.68 | 418.88 | 3.83 | 3.79 |
| Valley City, IL | 62.0 | 422.77 | 422.73 | 418.90 | 3.87 | 3.83 |
| | 63.0 | 422.89 | 422.84 | 418.91 | 3.98 | 3.93 |
| | 64.0 | 423.00 | 422.94 | 418.92 | 4.08 | 4.02 |
| | 65.0 | 423.12 | 423.05 | 418.93 | 4.19 | 4.12 |
| | 66.0 | 423.23 | 423.15 | 418.94 | 4.29 | 4.21 |
| | 67.0 | 423.35 | 423.26 | 418.95 | 4.40 | 4.31 |
| | 68.0 | 423.47 | 423.37 | 418.96 | 4.51 | 4.41 |
| | 69.0 | 423.58 | 423.47 | 418.97 | 4.61 | 4.50 |
| | 70.0 | 423.70 | 423.58 | 418.98 | 4.72 | 4.60 |
| | 71.0 | 423.81 | 423.68 | 418.99 | 4.82 | 4.69 |
| Meredosia, IL | 72.0 | 423.93 | 423.79 | 419.00 | 4.93 | 4.79 |
| | 73.0 | 424.05 | 423.90 | 419.01 | 5.03 | 4.88 |
| | 74.0 | 424.16 | 424.00 | 419.03 | 5.14 | 4.98 |
| | 75.0 | 424.28 | 424.11 | 419.04 | 5.24 | 5.07 |
| | 76.0 | 424.40 | 424.22 | 419.05 | 5.34 | 5.17 |
| | 77.0 | 424.51 | 424.32 | 419.06 | 5.45 | 5.26 |
| | 78.0 | 424.63 | 424.43 | 419.08 | 5.55 | 5.35 |
| | 79.0 | 424.74 | 424.53 | 419.09 | 5.66 | 5.45 |
| LaGrange LD | 80.0 | 424.86 | 424.64 | 419.10 | 5.76 | 5.54 |

SURVEY NOTES

1) HORIZONTAL DATUM: NAD83
GRID: ILLINOIS WEST
UNITS: US SURVEY FT
2) VERTICAL DATUM: NGVD29
3) DEPTHS SHOWN BELOW MINIMUM POOL
4) SURVEY VESSEL: MARY ROSE
ECHOSOUNDER: ODOM ECHOTRAC CV200
TRANSDUCER: ODOM OTSBE200/24 4 DEGREE, 200Khz
GNSS RECEIVER: HEMISPHERE VS330
GNSS SOURCE: TRIMBLE VRS NETWORK
SV PROBE: ODOM DIGIBAR PRO
TIDE SOURCE: RIVER GAUGE INTERPOLATION

St. Louis District

DATES OF SURVEY:
JUNE 24th 2021

FILE NO.: RM50-75_24x36
REQUEST NO.: ########

SCALE:
1" = 400'

FIELD BOOKS:

Approved: NAME
FIELD CARTOGRAPHER

Approved: NAME
CIVIL ENGINEERING TECHNICIAN

Approved: NAME
ASST. CHIEF OF SURVEY

Approved: NAME
CHIEF OF SURVEY

Date: JUNE 24, 2021

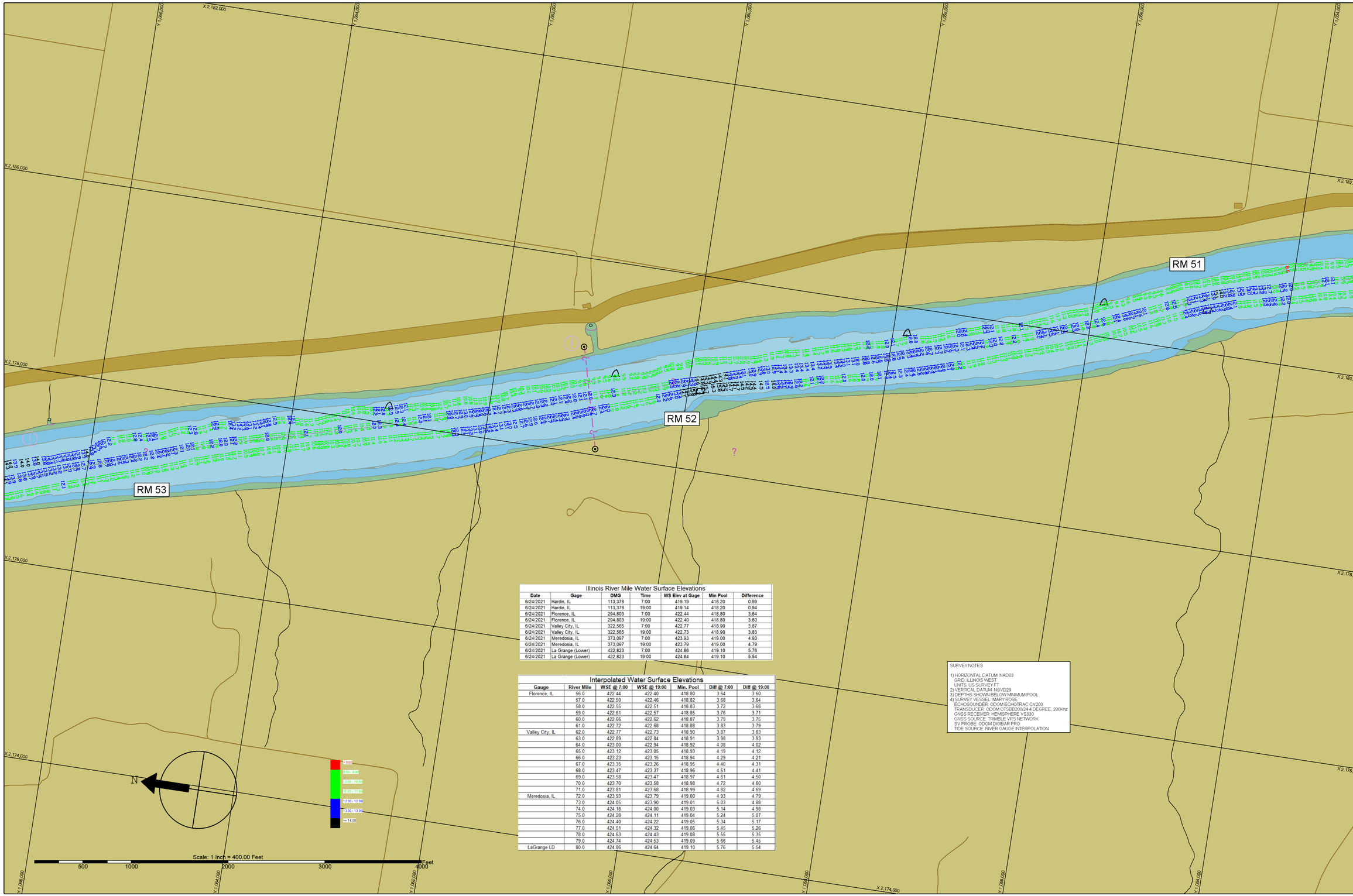
U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY:
SEAWORKS GROUP LLC
185 E MAIN ST STE. 414
BENTON HARBOR, MI 49022

LOWER ILLINOIS RIVER
BASIN
ILLINOIS RIVER
CHANNEL CONDITION SURVEY
MILES 50-75

SHEET NO.

1 OF 13




Illinois River Mile Water Surface Elevations

| Date | Gage | DMG | Time | WS Elev at Gage | Min Pool | Difference |
|---|---|---|---|---|---|---|
| 6/24/2021 | Hardin, IL | 113,378 | 7:00 | 419.19 | 418.20 | 0.99 |
| 6/24/2021 | Hardin, IL | 113,378 | 19:00 | 419.14 | 418.20 | 0.94 |
| 6/24/2021 | Florence, IL | 294,803 | 7:00 | 422.44 | 418.80 | 3.64 |
| 6/24/2021 | Florence, IL | 294,803 | 19:00 | 422.40 | 418.80 | 3.60 |
| 6/24/2021 | Valley City, IL | 322,565 | 7:00 | 422.77 | 418.90 | 3.87 |
| 6/24/2021 | Valley City, IL | 322,565 | 19:00 | 422.73 | 418.90 | 3.83 |
| 6/24/2021 | Meredosia, IL | 373,097 | 7:00 | 423.93 | 419.00 | 4.93 |
| 6/24/2021 | Meredosia, IL | 373,097 | 19:00 | 423.79 | 419.00 | 4.79 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 7:00 | 424.86 | 419.10 | 5.76 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 19:00 | 424.64 | 419.10 | 5.54 |

Interpolated Water Surface Elevations

| Gauge | River Mile | WSE @ 7:00 | WSE @ 19:00 | Min. Pool | Diff @ 7:00 | Diff @ 19:00 |
|---|---|---|---|---|---|---|
| Florence, IL | 56.0 | 422.44 | 422.40 | 418.80 | 3.64 | 3.60 |
| | 57.0 | 422.50 | 422.46 | 418.82 | 3.68 | 3.64 |
| | 58.0 | 422.55 | 422.51 | 418.83 | 3.72 | 3.68 |
| | 59.0 | 422.61 | 422.57 | 418.85 | 3.76 | 3.71 |
| | 60.0 | 422.66 | 422.62 | 418.87 | 3.79 | 3.75 |
| | 61.0 | 422.72 | 422.68 | 418.88 | 3.83 | 3.79 |
| Valley City, IL | 62.0 | 422.77 | 422.73 | 418.90 | 3.87 | 3.83 |
| | 63.0 | 422.89 | 422.84 | 418.91 | 3.98 | 3.93 |
| | 64.0 | 423.00 | 422.94 | 418.92 | 4.08 | 4.02 |
| | 65.0 | 423.12 | 423.05 | 418.93 | 4.19 | 4.12 |
| | 66.0 | 423.23 | 423.15 | 418.94 | 4.29 | 4.21 |
| | 67.0 | 423.35 | 423.26 | 418.95 | 4.40 | 4.31 |
| | 68.0 | 423.47 | 423.37 | 418.96 | 4.51 | 4.41 |
| | 69.0 | 423.58 | 423.47 | 418.97 | 4.61 | 4.50 |
| | 70.0 | 423.70 | 423.58 | 418.98 | 4.72 | 4.60 |
| | 71.0 | 423.81 | 423.68 | 418.99 | 4.82 | 4.69 |
| Meredosia, IL | 72.0 | 423.93 | 423.79 | 419.00 | 4.93 | 4.79 |
| | 73.0 | 424.05 | 423.90 | 419.01 | 5.03 | 4.88 |
| | 74.0 | 424.16 | 424.00 | 419.03 | 5.14 | 4.98 |
| | 75.0 | 424.28 | 424.11 | 419.04 | 5.24 | 5.07 |
| | 76.0 | 424.40 | 424.22 | 419.05 | 5.34 | 5.17 |
| | 77.0 | 424.51 | 424.32 | 419.06 | 5.45 | 5.26 |
| | 78.0 | 424.63 | 424.43 | 419.08 | 5.55 | 5.35 |
| | 79.0 | 424.74 | 424.53 | 419.09 | 5.66 | 5.45 |
| LaGrange LD | 80.0 | 424.86 | 424.64 | 419.10 | 5.76 | 5.54 |

SURVEY NOTES

1) HORIZONTAL DATUM: NAD83
GRID: ILLINOIS WEST
UNITS: US SURVEY FT
2) VERTICAL DATUM: NGVD29
3) DEPTHS SHOWN BELOW MINIMUM POOL
4) SURVEY VESSEL: MARY ROSE
ECHOSOUNDER: ODOM ECHOTRAC CV200
TRANSDUCER: ODOM OTSBB206V24 4 DEGREE, 200khz
GNSS RECEIVER: HEMISPHERE VS330
GNSS SOURCE: TRIMBLE VRS NETWORK
SV PROBE: ODOM DIGIBAR PRO
TIDE SOURCE: RIVER GAUGE INTERPOLATION

St. Louis District

DATES OF SURVEY:
JUNE 24th 2021

SCALE:
1" = 400'

FIELD BOOKS:
____
____
____

FILE NO.: RM50-75_24x36
REQUEST NO.: ########

Approved: NAME
FIELD CARTOGRAPHER
Approved: NAME
CIVIL ENGINEERING TECHNICIAN
Approved: NAME
ASST. CHIEF OF SURVEY
Approved: NAME
CHIEF OF SURVEY
Date: JUNE 24, 2021

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

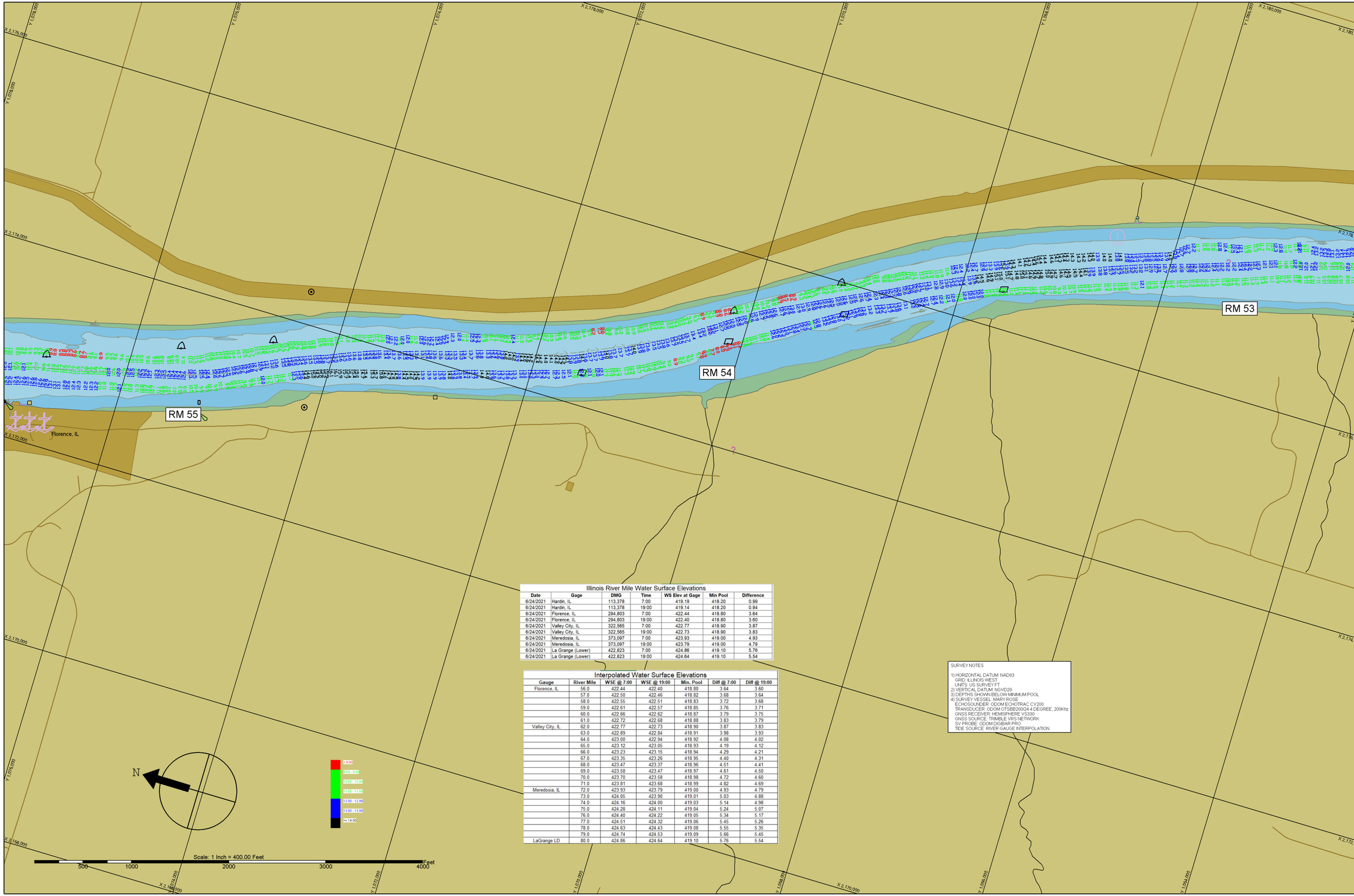
SURVEYED BY:
SEAWORKS GROUP, LLC
185 E MAIN ST STE. 414
BENTON HARBOR, MI 49022

LOWER ILLINOIS RIVER
BASIN
ILLINOIS RIVER

CHANNEL CONDITION SURVEY
MILES 50-75

SHEET NO.

2 OF 13




Illinois River Mile Water Surface Elevations

| Date | Gage | DMG | Time | WS Elev at Gage | Min Pool | Difference |
|---|---|---|---|---|---|---|
| 6/24/2021 | Hardin, IL | 113,378 | 7:00 | 419.19 | 418.20 | 0.99 |
| 6/24/2021 | Hardin, IL | 113,378 | 19:00 | 419.14 | 418.20 | 0.94 |
| 6/24/2021 | Florence, IL | 294,803 | 7:00 | 422.44 | 418.80 | 3.64 |
| 6/24/2021 | Florence, IL | 294,803 | 19:00 | 422.40 | 418.80 | 3.60 |
| 6/24/2021 | Valley City, IL | 322,565 | 7:00 | 422.77 | 418.90 | 3.87 |
| 6/24/2021 | Valley City, IL | 322,565 | 19:00 | 422.73 | 418.90 | 3.83 |
| 6/24/2021 | Meredosia, IL | 373,097 | 7:00 | 423.93 | 419.00 | 4.93 |
| 6/24/2021 | Meredosia, IL | 373,097 | 19:00 | 423.79 | 419.00 | 4.79 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 7:00 | 424.86 | 419.10 | 5.76 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 19:00 | 424.64 | 419.10 | 5.54 |

Interpolated Water Surface Elevations

| Gauge | River Mile | WSE @ 7:00 | WSE @ 19:00 | Min. Pool | Diff @ 7:00 | Diff @ 19:00 |
|---|---|---|---|---|---|---|
| Florence, IL | 56.0 | 422.44 | 422.40 | 418.80 | 3.64 | 3.60 |
| | 57.0 | 422.50 | 422.46 | 418.82 | 3.68 | 3.64 |
| | 58.0 | 422.55 | 422.51 | 418.83 | 3.72 | 3.68 |
| | 59.0 | 422.61 | 422.57 | 418.85 | 3.76 | 3.71 |
| | 60.0 | 422.66 | 422.62 | 418.87 | 3.79 | 3.75 |
| | 61.0 | 422.72 | 422.68 | 418.88 | 3.83 | 3.79 |
| Valley City, IL | 62.0 | 422.77 | 422.73 | 418.90 | 3.87 | 3.83 |
| | 63.0 | 422.89 | 422.84 | 418.91 | 3.98 | 3.93 |
| | 64.0 | 423.00 | 422.94 | 418.92 | 4.08 | 4.02 |
| | 65.0 | 423.12 | 423.05 | 418.93 | 4.19 | 4.12 |
| | 66.0 | 423.23 | 423.15 | 418.94 | 4.29 | 4.21 |
| | 67.0 | 423.35 | 423.26 | 418.95 | 4.40 | 4.31 |
| | 68.0 | 423.47 | 423.37 | 418.96 | 4.51 | 4.41 |
| | 69.0 | 423.58 | 423.47 | 418.97 | 4.61 | 4.50 |
| | 70.0 | 423.70 | 423.58 | 418.98 | 4.72 | 4.60 |
| | 71.0 | 423.81 | 423.68 | 418.99 | 4.82 | 4.69 |
| Meredosia, IL | 72.0 | 423.93 | 423.79 | 419.00 | 4.93 | 4.79 |
| | 73.0 | 424.05 | 423.90 | 419.01 | 5.03 | 4.88 |
| | 74.0 | 424.16 | 424.00 | 419.03 | 5.14 | 4.98 |
| | 75.0 | 424.28 | 424.11 | 419.04 | 5.24 | 5.07 |
| | 76.0 | 424.40 | 424.22 | 419.05 | 5.34 | 5.17 |
| | 77.0 | 424.51 | 424.32 | 419.06 | 5.45 | 5.26 |
| | 78.0 | 424.63 | 424.43 | 419.08 | 5.55 | 5.35 |
| | 79.0 | 424.74 | 424.53 | 419.09 | 5.66 | 5.45 |
| LaGrange LD | 80.0 | 424.86 | 424.64 | 419.10 | 5.76 | 5.54 |

SURVEY NOTES

1) HORIZONTAL DATUM: NAD83
GRID: ILLINOIS WEST
UNITS: US SURVEY FT
2) VERTICAL DATUM: NGVD29
3) DEPTHS SHOWN BELOW MINIMUM POOL
4) SURVEY VESSEL: MARY ROSE
ECHOSOUNDER: ODOM ECHOTRAC CV200
TRANSDUCER: ODOM 0TSBE200/24 4 DEGREE, 200Khz
GNSS RECEIVER: HEMISPHERE VS330
GNSS SOURCE: TRIMBLE VRS NETWORK
SV PROBE: ODOM DIGIBAR PRO
TIDE SOURCE: RIVER GAUGE INTERPOLATION

St. Louis District

DATES OF SURVEY:
JUNE 24th 2021

SCALE:
1" = 400'

FIELD BOOKS:

FILE NO.: RM50-75_24x36
REQUEST NO.: ########

Approved: NAME
FIELD CARTOGRAPHER

Approved: NAME
CIVIL ENGINEERING TECHNICIAN

Approved: NAME
ASST. CHIEF OF SURVEY

Approved: NAME
CHIEF OF SURVEY

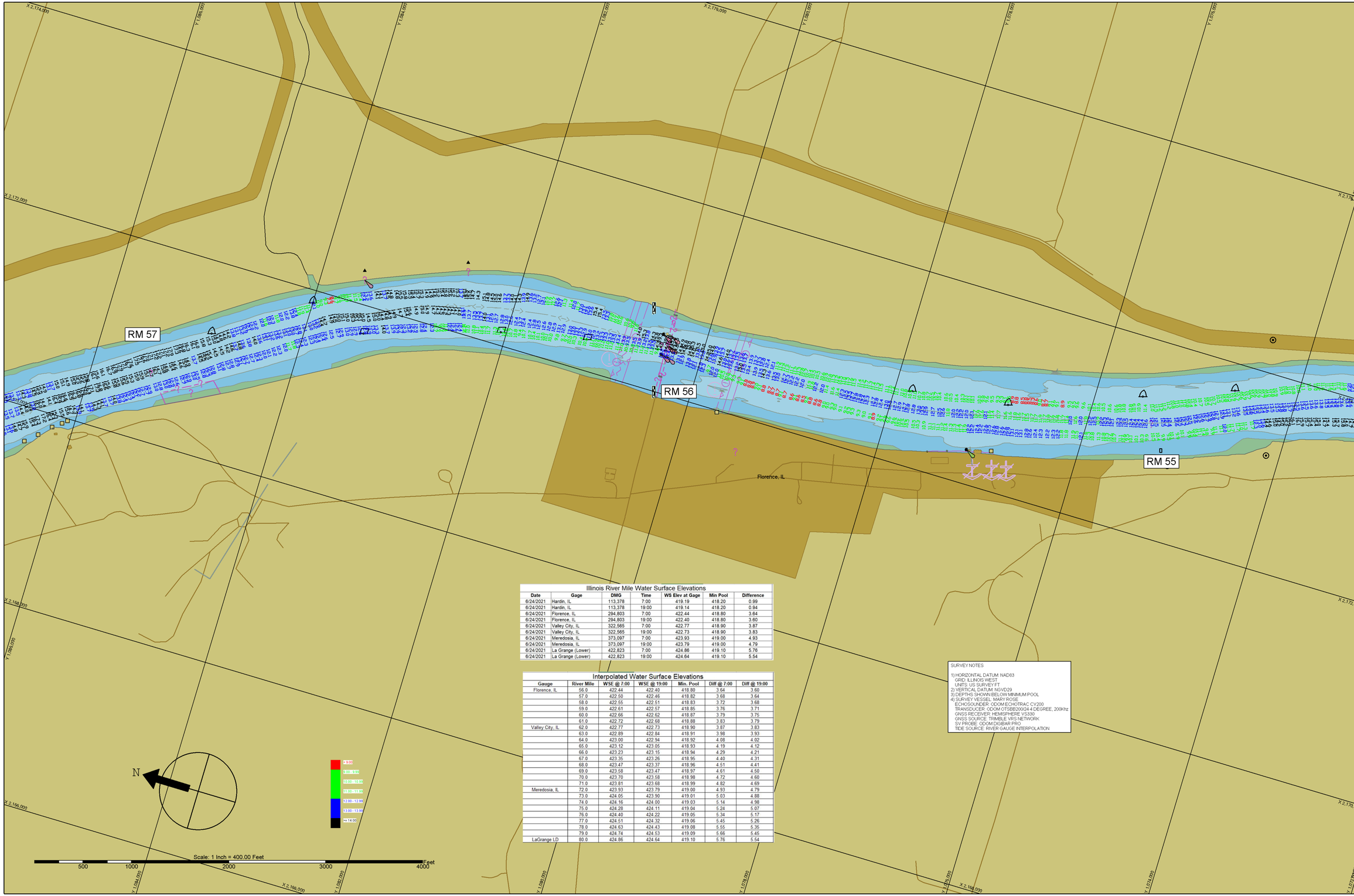
Date: JUNE 24, 2021

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY:
SEAWORKS GROUP LLC
185 E MAIN ST STE. 414
BENTON HARBOR, MI 49022

LOWER ILLINOIS RIVER
BASIN
ILLINOIS RIVER
CHANNEL CONDITION SURVEY
MILES 50-75

SHEET NO.




Illinois River Mile Water Surface Elevations

| Date | Gage | DMG | Time | WS Elev at Gage | Min Pool | Difference |
|---|---|---|---|---|---|---|
| 6/24/2021 | Hardin, IL | 113,378 | 7:00 | 419.19 | 418.20 | 0.99 |
| 6/24/2021 | Hardin, IL | 113,378 | 19:00 | 419.14 | 418.20 | 0.94 |
| 6/24/2021 | Florence, IL | 294,803 | 7:00 | 422.44 | 418.80 | 3.64 |
| 6/24/2021 | Florence, IL | 294,803 | 19:00 | 422.40 | 418.80 | 3.60 |
| 6/24/2021 | Valley City, IL | 322,565 | 7:00 | 422.77 | 418.90 | 3.87 |
| 6/24/2021 | Valley City, IL | 322,565 | 19:00 | 422.73 | 418.90 | 3.83 |
| 6/24/2021 | Meredosia, IL | 373,097 | 7:00 | 423.93 | 419.00 | 4.93 |
| 6/24/2021 | Meredosia, IL | 373,097 | 19:00 | 423.79 | 419.00 | 4.79 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 7:00 | 424.86 | 419.10 | 5.76 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 19:00 | 424.64 | 419.10 | 5.54 |

Interpolated Water Surface Elevations

| Gauge | River Mile | WSE @ 7:00 | WSE @ 19:00 | Min. Pool | Diff @ 7:00 | Diff @ 19:00 |
|---|---|---|---|---|---|---|
| Florence, IL | 56.0 | 422.44 | 422.40 | 418.80 | 3.64 | 3.60 |
| | 57.0 | 422.50 | 422.46 | 418.82 | 3.68 | 3.64 |
| | 58.0 | 422.55 | 422.51 | 418.83 | 3.72 | 3.68 |
| | 59.0 | 422.61 | 422.57 | 418.85 | 3.76 | 3.71 |
| | 60.0 | 422.66 | 422.62 | 418.87 | 3.79 | 3.75 |
| | 61.0 | 422.72 | 422.68 | 418.88 | 3.83 | 3.79 |
| Valley City, IL | 62.0 | 422.77 | 422.73 | 418.90 | 3.87 | 3.83 |
| | 63.0 | 422.89 | 422.84 | 418.91 | 3.98 | 3.93 |
| | 64.0 | 423.00 | 422.94 | 418.92 | 4.08 | 4.02 |
| | 65.0 | 423.12 | 423.05 | 418.93 | 4.19 | 4.12 |
| | 66.0 | 423.23 | 423.15 | 418.94 | 4.29 | 4.21 |
| | 67.0 | 423.35 | 423.26 | 418.95 | 4.40 | 4.31 |
| | 68.0 | 423.47 | 423.37 | 418.96 | 4.51 | 4.41 |
| | 69.0 | 423.58 | 423.47 | 418.97 | 4.61 | 4.50 |
| | 70.0 | 423.70 | 423.58 | 418.98 | 4.72 | 4.60 |
| | 71.0 | 423.81 | 423.68 | 418.99 | 4.82 | 4.69 |
| Meredosia, IL | 72.0 | 423.93 | 423.79 | 419.00 | 4.93 | 4.79 |
| | 73.0 | 424.05 | 423.90 | 419.01 | 5.03 | 4.88 |
| | 74.0 | 424.16 | 424.00 | 419.03 | 5.14 | 4.98 |
| | 75.0 | 424.28 | 424.11 | 419.04 | 5.24 | 5.07 |
| | 76.0 | 424.40 | 424.22 | 419.05 | 5.34 | 5.17 |
| | 77.0 | 424.51 | 424.32 | 419.06 | 5.45 | 5.26 |
| | 78.0 | 424.63 | 424.43 | 419.08 | 5.55 | 5.35 |
| | 79.0 | 424.74 | 424.53 | 419.09 | 5.66 | 5.45 |
| LaGrange LD | 80.0 | 424.86 | 424.64 | 419.10 | 5.76 | 5.54 |

SURVEY NOTES

1) HORIZONTAL DATUM: NAD83
GRID: ILLINOIS WEST
UNITS: US SURVEY FT
2) VERTICAL DATUM: NGVD29
3) DEPTHS SHOWN BELOW MINIMUM POOL
4) SURVEY VESSEL: MARY ROSE
ECHOSOUNDER: ODOM ECHOTRAC CV200
TRANSDUCER: ODOM 0TSBB200/24 4 DEGREE, 200Khz
GNSS RECEIVER: HEMISPHERE VS330
GNSS SOURCE: TRIMBLE VRS NETWORK
SV PROBE: ODOM DIGIBAR PRO
TIDE SOURCE: RIVER GAUGE INTERPOLATION

St. Louis District

DATES OF SURVEY:
JUNE 24th 2021

FILE NO.: RM50-75_24x36
REQUEST NO.: ########

SCALE:
1" = 400'

FIELD BOOKS:
____
____
____

Approved: NAME
FIELD CARTOGRAPHER

Approved: NAME
CIVIL ENGINEERING TECHNICIAN

Approved: NAME
ASST. CHIEF OF SURVEY

Approved: NAME
CHIEF OF SURVEY

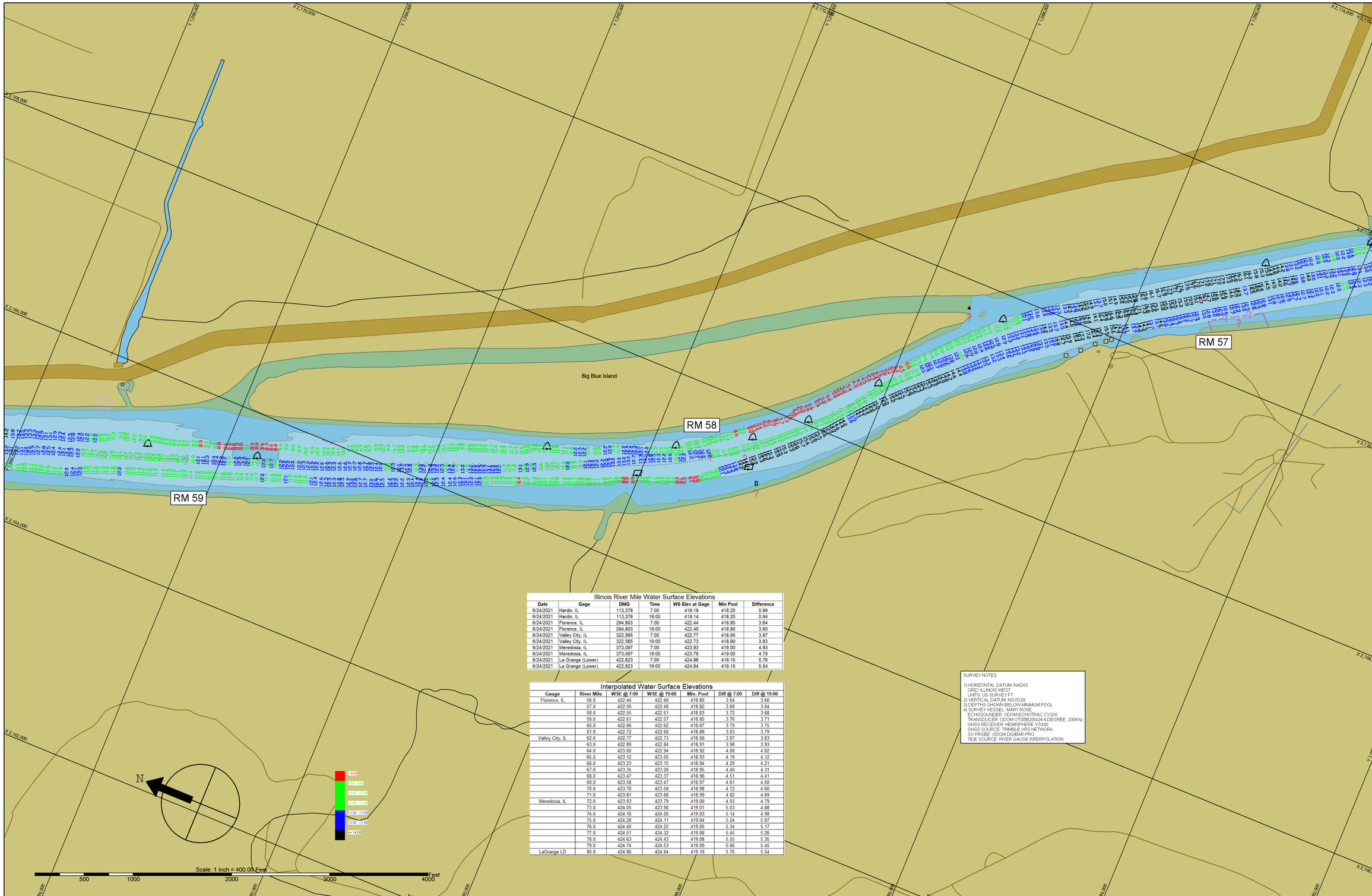
Date: JUNE 24, 2021

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY:
SEAWORKS GROUP LLC
185 E MAIN ST STE. 414
BENTON HARBOR, MI 49022

LOWER ILLINOIS RIVER
BASIN
ILLINOIS RIVER
CHANNEL CONDITION SURVEY
MILES 50-75

SHEET NO.
4 OF 13




Illinois River Mile Water Surface Elevations

| Date | Gage | DMG | Time | WS Elev at Gage | Min Pool | Difference |
|---|---|---|---|---|---|---|
| 6/24/2021 | Hardin, IL | 113,378 | 7:00 | 419.19 | 418.20 | 0.99 |
| 6/24/2021 | Hardin, IL | 113,378 | 19:00 | 419.14 | 418.20 | 0.94 |
| 6/24/2021 | Florence, IL | 294,803 | 7:00 | 422.44 | 418.80 | 3.64 |
| 6/24/2021 | Florence, IL | 294,803 | 19:00 | 422.40 | 418.80 | 3.60 |
| 6/24/2021 | Valley City, IL | 322,565 | 7:00 | 422.77 | 418.90 | 3.87 |
| 6/24/2021 | Valley City, IL | 322,565 | 19:00 | 422.73 | 418.90 | 3.83 |
| 6/24/2021 | Meredosia, IL | 373,097 | 7:00 | 423.93 | 419.00 | 4.93 |
| 6/24/2021 | Meredosia, IL | 373,097 | 19:00 | 423.79 | 419.00 | 4.79 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 7:00 | 424.86 | 419.10 | 5.76 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 19:00 | 424.64 | 419.10 | 5.54 |

Interpolated Water Surface Elevations

| Gauge | River Mile | WSE @ 7:00 | WSE @ 19:00 | Min. Pool | Diff @ 7:00 | Diff @ 19:00 |
|---|---|---|---|---|---|---|
| Florence, IL | 56.0 | 422.44 | 422.40 | 418.80 | 3.64 | 3.60 |
| | 57.0 | 422.50 | 422.46 | 418.82 | 3.68 | 3.64 |
| | 58.0 | 422.55 | 422.51 | 418.83 | 3.72 | 3.68 |
| | 59.0 | 422.61 | 422.57 | 418.85 | 3.76 | 3.71 |
| | 60.0 | 422.66 | 422.62 | 418.87 | 3.79 | 3.75 |
| | 61.0 | 422.72 | 422.68 | 418.88 | 3.83 | 3.79 |
| Valley City, IL | 62.0 | 422.77 | 422.73 | 418.90 | 3.87 | 3.83 |
| | 63.0 | 422.89 | 422.84 | 418.91 | 3.98 | 3.93 |
| | 64.0 | 423.00 | 422.94 | 418.92 | 4.08 | 4.02 |
| | 65.0 | 423.12 | 423.05 | 418.93 | 4.19 | 4.12 |
| | 66.0 | 423.23 | 423.15 | 418.94 | 4.29 | 4.21 |
| | 67.0 | 423.35 | 423.26 | 418.95 | 4.40 | 4.31 |
| | 68.0 | 423.47 | 423.37 | 418.96 | 4.51 | 4.41 |
| | 69.0 | 423.58 | 423.47 | 418.97 | 4.61 | 4.50 |
| | 70.0 | 423.70 | 423.58 | 418.98 | 4.72 | 4.60 |
| | 71.0 | 423.81 | 423.68 | 418.99 | 4.82 | 4.69 |
| Meredosia, IL | 72.0 | 423.93 | 423.79 | 419.00 | 4.93 | 4.79 |
| | 73.0 | 424.05 | 423.90 | 419.01 | 5.03 | 4.88 |
| | 74.0 | 424.16 | 424.00 | 419.03 | 5.14 | 4.98 |
| | 75.0 | 424.28 | 424.11 | 419.04 | 5.24 | 5.07 |
| | 76.0 | 424.40 | 424.22 | 419.05 | 5.34 | 5.17 |
| | 77.0 | 424.51 | 424.32 | 419.06 | 5.45 | 5.26 |
| | 78.0 | 424.63 | 424.43 | 419.08 | 5.55 | 5.35 |
| | 79.0 | 424.74 | 424.53 | 419.09 | 5.66 | 5.45 |
| LaGrange LD | 80.0 | 424.86 | 424.64 | 419.10 | 5.76 | 5.54 |

SURVEY NOTES

1) HORIZONTAL DATUM: NAD83
GRID: ILLINOIS WEST
UNITS: US SURVEY FT
2) VERTICAL DATUM: NGVD29
3) DEPTHS SHOWN BELOW MINIMUM POOL
4) SURVEY VESSEL: MARY ROSE
ECHOSOUNDER: ODOM ECHOTRAC CV200
TRANSDUCER: ODOM OTSBB200/24 4 DEGREE, 200Khz
GNSS RECEIVER: HEMISPHERE VS330
GNSS SOURCE: TRIMBLE VRS NETWORK
SV PROBE: ODOM DIGIBAR PRO
TIDE SOURCE: RIVER GAUGE INTERPOLATION

St. Louis District

DATES OF SURVEY:
JUNE 24th 2021

FILE NO.: RM50-75_24x36
REQUEST NO.: ########

SCALE:
1" = 400'

FIELD BOOKS:
____
____
____

Approved: NAME
FIELD CARTOGRAPHER

Approved: NAME
CIVIL ENGINEERING TECHNICIAN

Approved: NAME
ASST. CHIEF OF SURVEY

Approved: NAME
CHIEF OF SURVEY

Date: JUNE 24, 2021

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

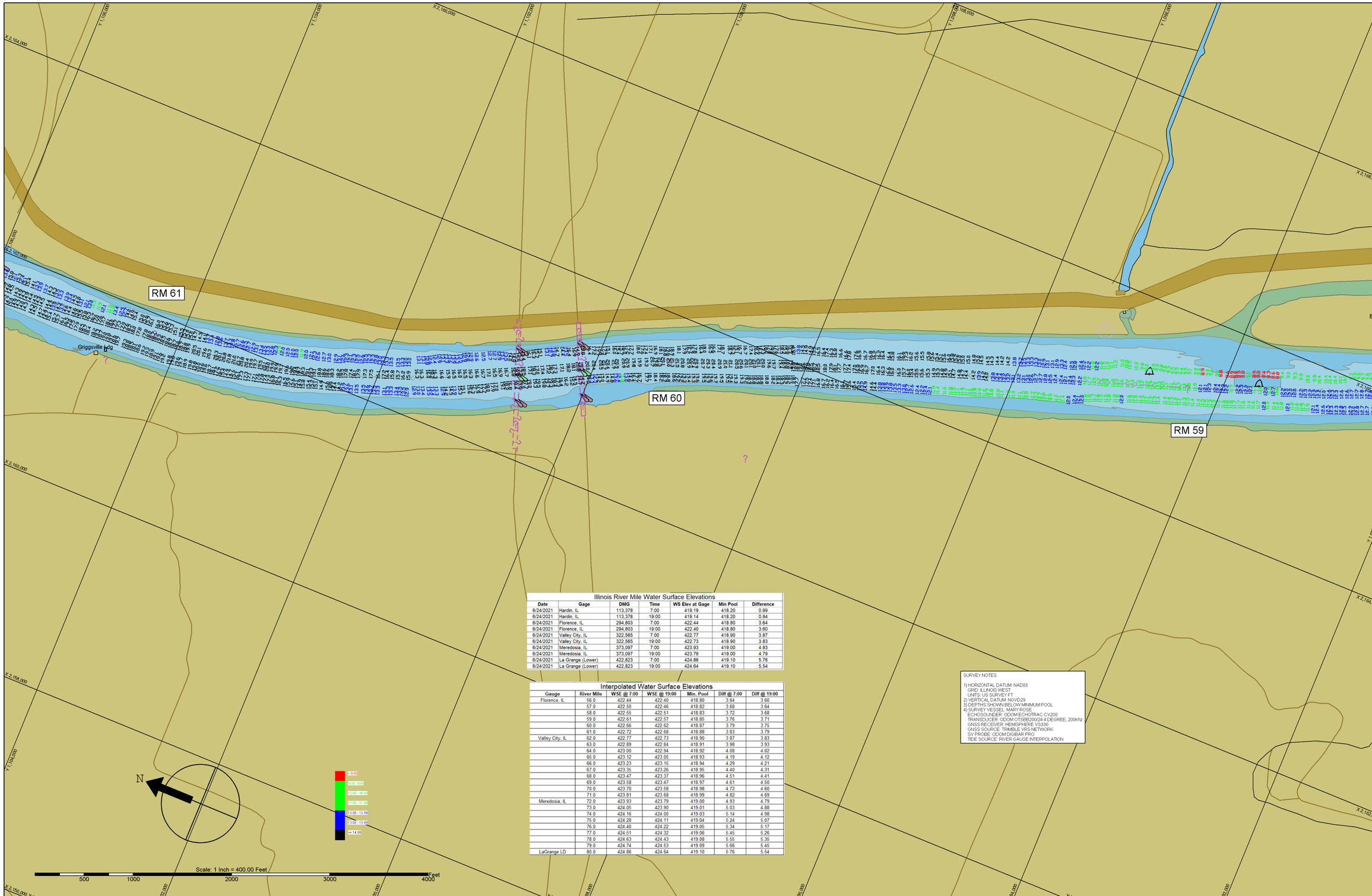
SURVEYED BY:
SEAWORKS GROUP LLC
165 E MAIN ST STE. 414
BENTON HARBOR, MI 49022

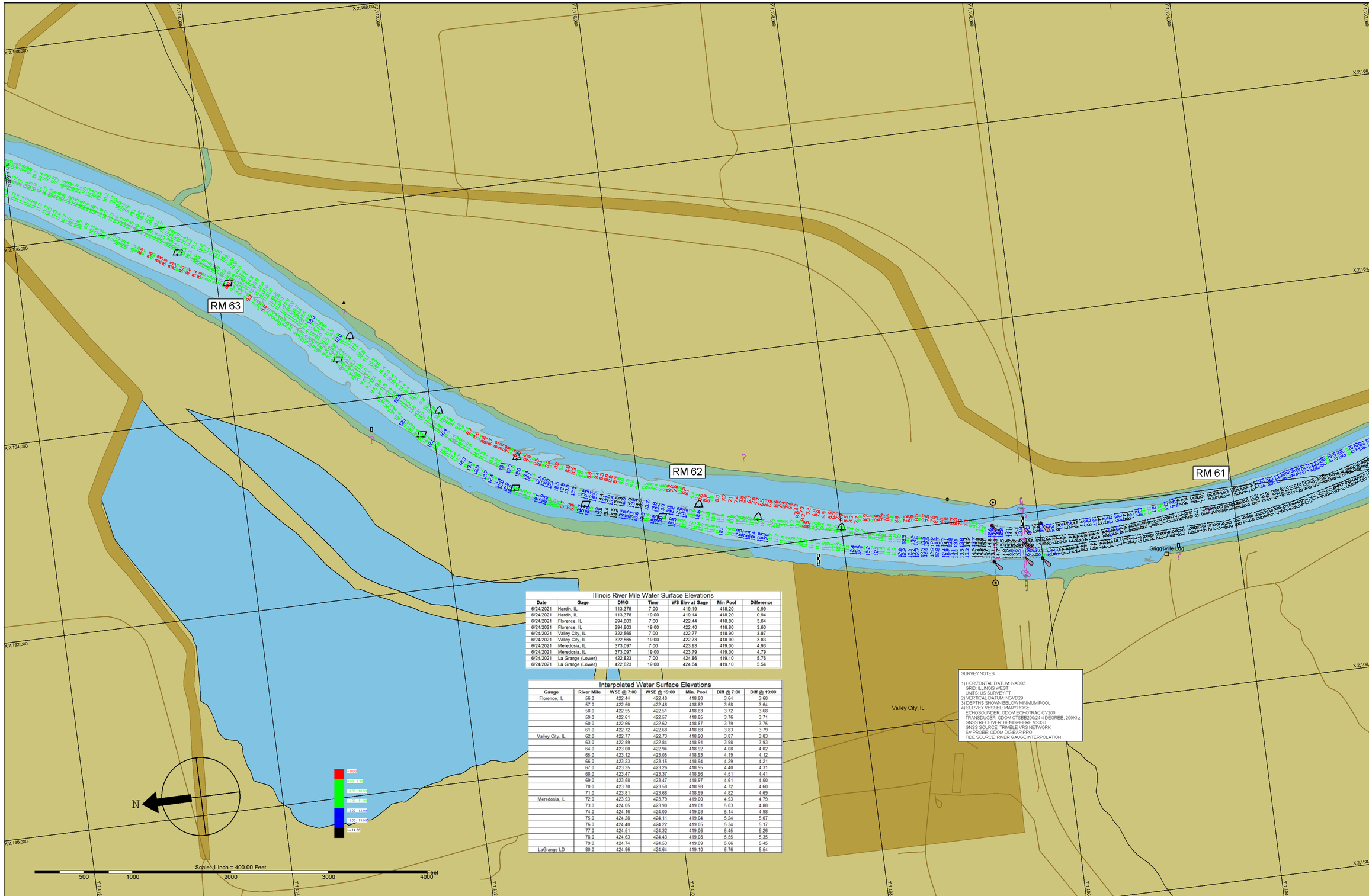
LOWER ILLINOIS RIVER
BASIN
ILLINOIS RIVER

CHANNEL CONDITION SURVEY
MILES 50-75

SHEET NO.

5 OF 13


RM 61
RM 60
RM 59
Griggsville Ind
Big
N
Scale: 1 Inch = 400.00 Feet
500
1000
2000
3000
4000
Feet
X 2,164,000
X 2,162,000
X 2,160,000
X 2,158,000
X 2,156,000
Y 1,102,000
Y 1,100,000
Y 1,098,000
Y 1,096,000
Y 1,094,000
Y 1,092,000
Y 1,090,000
Y 1,088,000
Y 1,086,000
Y 1,084,000
Y 1,082,000
Y 1,080,000
Y 1,078,000
Y 1,076,000
Y 1,074,000
Y 1,072,000
Y 1,070,000
Y 1,068,000
Y 1,066,000
Y 1,064,000
Y 1,062,000
Y 1,060,000
Y 1,058,000
Y 1,056,000
Y 1,054,000
Y 1,052,000
Y 1,050,000
Y 1,048,000
Y 1,046,000
Y 1,044,000
Y 1,042,000
Y 1,040,000
Y 1,038,000
Y 1,036,000
Y 1,034,000
Y 1,032,000
Y 1,030,000
Y 1,028,000
Y 1,026,000
Y 1,024,000
Y 1,022,000
Y 1,020,000
Y 1,018,000
Y 1,016,000
Y 1,014,000
Y 1,012,000
Y 1,010,000
Y 1,008,000
Y 1,006,000
Y 1,004,000
Y 1,002,000
Y 1,000,000
Y 1,098,000
Y 1,096,000
Y 1,094,000
Y 1,092,000
Y 1,090,000
Y 1,088,000
Y 1,086,000
Y 1,084,000
Y 1,082,000
Y 1,080,000
Y 1,078,000
Y 1,076,000
Y 1,074,000
Y 1,072,000
Y 1,070,000
Y 1,068,000
Y 1,066,000
Y 1,064,000
Y 1,062,000
Y 1,060,000
Y 1,058,000
Y 1,056,000
Y 1,054,000
Y 1,052,000
Y 1,050,000
Y 1,048,000
Y 1,046,000
Y 1,044,000
Y 1,042,000
Y 1,040,000
Y 1,038,000
Y 1,036,000
Y 1,034,000
Y 1,032,000
Y 1,030,000
Y 1,028,000
Y 1,026,000
Y 1,024,000
Y 1,022,000
Y 1,020,000
Y 1,018,000
Y 1,016,000
Y 1,014,000
Y 1,012,000
Y 1,010,000
Y 1,008,000
Y 1,006,000
Y 1,004,000
Y 1,002,000
Y 1,000,000
X 2,156,000
X 2,158,000
X 2,160,000
X 2,162,000
X 2,164,000
X 2,166,000
X 2,168,000
X 2,170,000
X 2,172,000
X 2,174,000
X 2,176,000
X 2,178,000
X 2,180,000
X 2,182,000
X 2,184,000
X 2,186,000
X 2,188,000
X 2,190,000
X 2,192,000
X 2,194,000
X




Illinois River Mile Water Surface Elevations

| Date | Gage | DMG | Time | WS Elev at Gage | Min Pool | Difference |
|---|---|---|---|---|---|---|
| 6/24/2021 | Hardin, IL | 113,378 | 7:00 | 419.19 | 418.20 | 0.99 |
| 6/24/2021 | Hardin, IL | 113,378 | 19:00 | 419.14 | 418.20 | 0.94 |
| 6/24/2021 | Florence, IL | 294,803 | 7:00 | 422.44 | 418.80 | 3.64 |
| 6/24/2021 | Florence, IL | 294,803 | 19:00 | 422.40 | 418.80 | 3.60 |
| 6/24/2021 | Valley City, IL | 322,565 | 7:00 | 422.77 | 418.90 | 3.87 |
| 6/24/2021 | Valley City, IL | 322,565 | 19:00 | 422.73 | 418.90 | 3.83 |
| 6/24/2021 | Meredosia, IL | 373,097 | 7:00 | 423.93 | 419.00 | 4.93 |
| 6/24/2021 | Meredosia, IL | 373,097 | 19:00 | 423.79 | 419.00 | 4.79 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 7:00 | 424.86 | 419.10 | 5.76 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 19:00 | 424.64 | 419.10 | 5.54 |

Interpolated Water Surface Elevations

| Gauge | River Mile | WSE @ 7:00 | WSE @ 19:00 | Min. Pool | Diff @ 7:00 | Diff @ 19:00 |
|---|---|---|---|---|---|---|
| Florence, IL | 56.0 | 422.44 | 422.40 | 418.80 | 3.64 | 3.60 |
| | 57.0 | 422.50 | 422.46 | 418.82 | 3.68 | 3.64 |
| | 58.0 | 422.55 | 422.51 | 418.83 | 3.72 | 3.68 |
| | 59.0 | 422.61 | 422.57 | 418.85 | 3.76 | 3.71 |
| | 60.0 | 422.66 | 422.62 | 418.87 | 3.79 | 3.75 |
| | 61.0 | 422.72 | 422.68 | 418.88 | 3.83 | 3.79 |
| Valley City, IL | 62.0 | 422.77 | 422.73 | 418.90 | 3.87 | 3.83 |
| | 63.0 | 422.89 | 422.84 | 418.91 | 3.98 | 3.93 |
| | 64.0 | 423.00 | 422.94 | 418.92 | 4.08 | 4.02 |
| | 65.0 | 423.12 | 423.05 | 418.93 | 4.19 | 4.12 |
| | 66.0 | 423.23 | 423.15 | 418.94 | 4.29 | 4.21 |
| | 67.0 | 423.35 | 423.26 | 418.95 | 4.40 | 4.31 |
| | 68.0 | 423.47 | 423.37 | 418.96 | 4.51 | 4.41 |
| | 69.0 | 423.58 | 423.47 | 418.97 | 4.61 | 4.50 |
| | 70.0 | 423.70 | 423.58 | 418.98 | 4.72 | 4.60 |
| | 71.0 | 423.81 | 423.68 | 418.99 | 4.82 | 4.69 |
| Meredosia, IL | 72.0 | 423.93 | 423.79 | 419.00 | 4.93 | 4.79 |
| | 73.0 | 424.05 | 423.90 | 419.01 | 5.03 | 4.88 |
| | 74.0 | 424.16 | 424.00 | 419.03 | 5.14 | 4.98 |
| | 75.0 | 424.28 | 424.11 | 419.04 | 5.24 | 5.07 |
| | 76.0 | 424.40 | 424.22 | 419.05 | 5.34 | 5.17 |
| | 77.0 | 424.51 | 424.32 | 419.06 | 5.45 | 5.26 |
| | 78.0 | 424.63 | 424.43 | 419.08 | 5.55 | 5.35 |
| | 79.0 | 424.74 | 424.53 | 419.09 | 5.66 | 5.45 |
| LaGrange LD | 80.0 | 424.86 | 424.64 | 419.10 | 5.76 | 5.54 |

SURVEY NOTES

1) HORIZONTAL DATUM: NAD83
GRID: ILLINOIS WEST
UNITS: US SURVEY FT
2) VERTICAL DATUM: NGVD29
3) DEPTHS SHOWN BELOW MINIMUM POOL
4) SURVEY VESSEL: MARY ROSE
ECHOSOUNDER: ODOM ECHOTRAC CV200
TRANSDUCER: ODOM OTSBB200/24 4 DEGREE, 200Khz
GNSS RECEIVER: HEMISPHERE VS330
GNSS SOURCE: TRIMBLE VRS NETWORK
SV PROBE: ODOM DIGIBAR PRO
TIDE SOURCE: RIVER GAUGE INTERPOLATION

St. Louis District

DATES OF SURVEY:
JUNE 24th 2021

SCALE:
1" = 400'

FIELD BOOKS:
____
____
____

FILE NO.: RM50-75_24x36
REQUEST NO.: ########

Approved: NAME
FIELD CARTOGRAPHER

Approved: NAME
CIVIL ENGINEERING TECHNICIAN

Approved: NAME
ASST. CHIEF OF SURVEY

Approved: NAME
CHIEF OF SURVEY

Date: JUNE 24, 2021

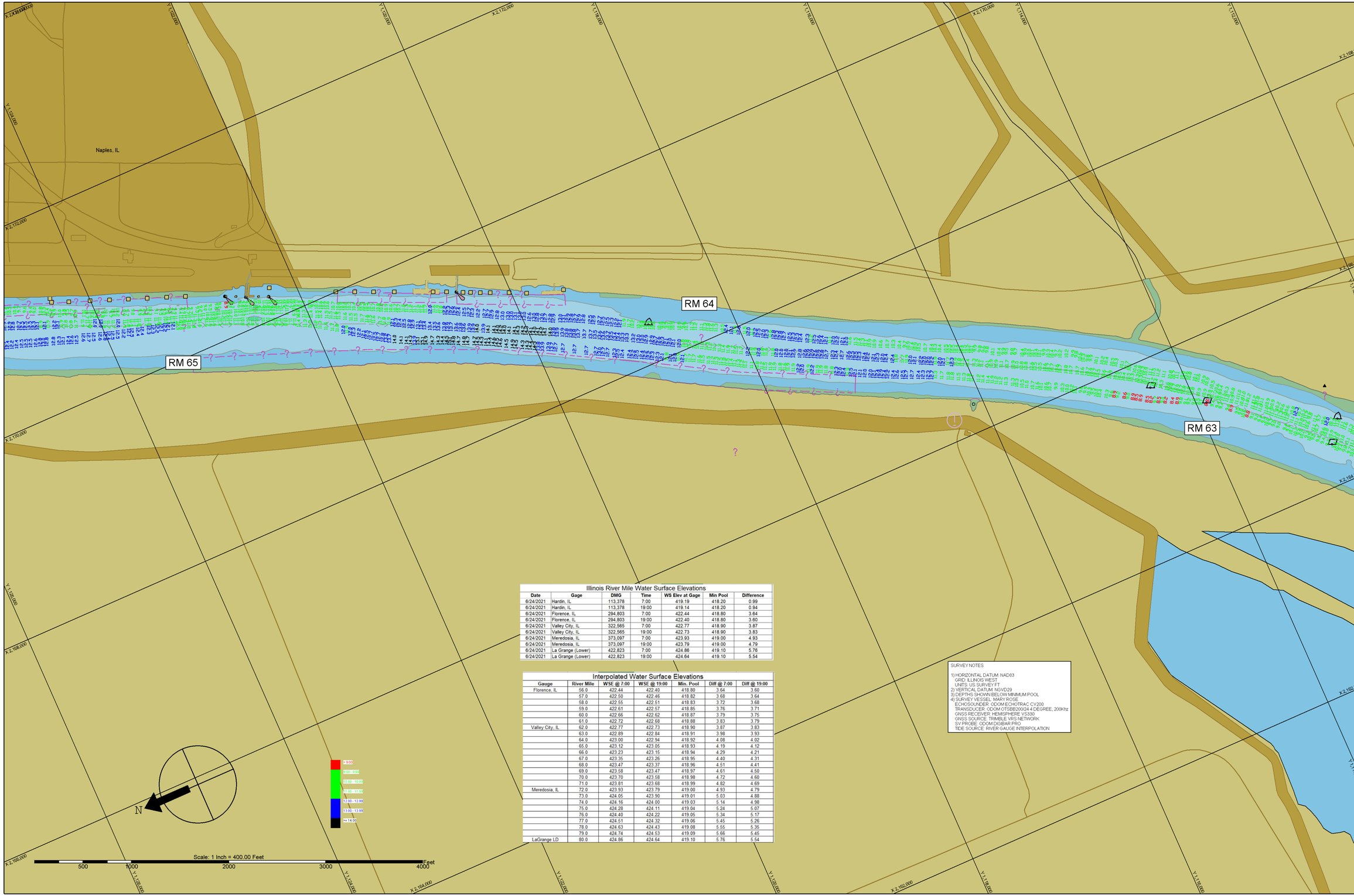
U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY:
SEAWORKS GROUP LLC
165 E MAIN ST STE. 414
BENTON HARBOR, MI 49022

LOWER ILLINOIS RIVER
BASIN
ILLINOIS RIVER
CHANNEL CONDITION SURVEY
MILES 50-75

SHEET NO.

7 OF 13




Illinois River Mile Water Surface Elevations

| Date | Gage | DMG | Time | WS Elev at Gage | Min Pool | Difference |
|---|---|---|---|---|---|---|
| 6/24/2021 | Hardin, IL | 113,378 | 7:00 | 419.19 | 418.20 | 0.99 |
| 6/24/2021 | Hardin, IL | 113,378 | 19:00 | 419.14 | 418.20 | 0.94 |
| 6/24/2021 | Florence, IL | 294,803 | 7:00 | 422.44 | 418.80 | 3.64 |
| 6/24/2021 | Florence, IL | 294,803 | 19:00 | 422.40 | 418.80 | 3.60 |
| 6/24/2021 | Valley City, IL | 322,565 | 7:00 | 422.77 | 418.90 | 3.87 |
| 6/24/2021 | Valley City, IL | 322,565 | 19:00 | 422.73 | 418.90 | 3.83 |
| 6/24/2021 | Meredosia, IL | 373,097 | 7:00 | 423.93 | 419.00 | 4.93 |
| 6/24/2021 | Meredosia, IL | 373,097 | 19:00 | 423.79 | 419.00 | 4.79 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 7:00 | 424.86 | 419.10 | 5.76 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 19:00 | 424.64 | 419.10 | 5.54 |

Interpolated Water Surface Elevations

| Gauge | River Mile | WSE @ 7:00 | WSE @ 19:00 | Min. Pool | Diff @ 7:00 | Diff @ 19:00 |
|---|---|---|---|---|---|---|
| Florence, IL | 56.0 | 422.44 | 422.40 | 418.80 | 3.64 | 3.60 |
| | 57.0 | 422.50 | 422.46 | 418.82 | 3.68 | 3.64 |
| | 58.0 | 422.55 | 422.51 | 418.83 | 3.72 | 3.68 |
| | 59.0 | 422.61 | 422.57 | 418.85 | 3.76 | 3.71 |
| | 60.0 | 422.66 | 422.62 | 418.87 | 3.79 | 3.75 |
| | 61.0 | 422.72 | 422.68 | 418.88 | 3.83 | 3.79 |
| Valley City, IL | 62.0 | 422.77 | 422.73 | 418.90 | 3.87 | 3.83 |
| | 63.0 | 422.89 | 422.84 | 418.91 | 3.98 | 3.93 |
| | 64.0 | 423.00 | 422.94 | 418.92 | 4.08 | 4.02 |
| | 65.0 | 423.12 | 423.05 | 418.93 | 4.19 | 4.12 |
| | 66.0 | 423.23 | 423.15 | 418.94 | 4.29 | 4.21 |
| | 67.0 | 423.35 | 423.26 | 418.95 | 4.40 | 4.31 |
| | 68.0 | 423.47 | 423.37 | 418.96 | 4.51 | 4.41 |
| | 69.0 | 423.58 | 423.47 | 418.97 | 4.61 | 4.50 |
| | 70.0 | 423.70 | 423.58 | 418.98 | 4.72 | 4.60 |
| | 71.0 | 423.81 | 423.68 | 418.99 | 4.82 | 4.69 |
| Meredosia, IL | 72.0 | 423.93 | 423.79 | 419.00 | 4.93 | 4.79 |
| | 73.0 | 424.05 | 423.90 | 419.01 | 5.03 | 4.88 |
| | 74.0 | 424.16 | 424.00 | 419.03 | 5.14 | 4.98 |
| | 75.0 | 424.28 | 424.11 | 419.04 | 5.24 | 5.07 |
| | 76.0 | 424.40 | 424.22 | 419.05 | 5.34 | 5.17 |
| | 77.0 | 424.51 | 424.32 | 419.06 | 5.45 | 5.26 |
| | 78.0 | 424.63 | 424.43 | 419.08 | 5.55 | 5.35 |
| | 79.0 | 424.74 | 424.53 | 419.09 | 5.66 | 5.45 |
| LaGrange LD | 80.0 | 424.86 | 424.64 | 419.10 | 5.76 | 5.54 |

SURVEY NOTES

1) HORIZONTAL DATUM: NAD83
GRID: ILLINOIS WEST
UNITS: US SURVEY FT
2) VERTICAL DATUM: NGVD29
3) DEPTHS SHOWN BELOW MINIMUM POOL
4) SURVEY VESSEL: MARY ROSE
ECHOSOUNDER: ODOM ECHOTRAC CV200
TRANSDUCER: ODOM OTSBB200/24 4 DEGREE, 200Khz
GNSS RECEIVER: HEMISPHERE VS330
GNSS SOURCE: TRIMBLE VRS NETWORK
SV PROBE: ODOM DIGIBAR PRO
TIDE SOURCE: RIVER GAUGE INTERPOLATION

St. Louis District

DATES OF SURVEY:
JUNE 24th 2021

SCALE:
1" = 400'

FIELD BOOKS:

FILE NO.: RM50-75_24x36
REQUEST NO.: ########

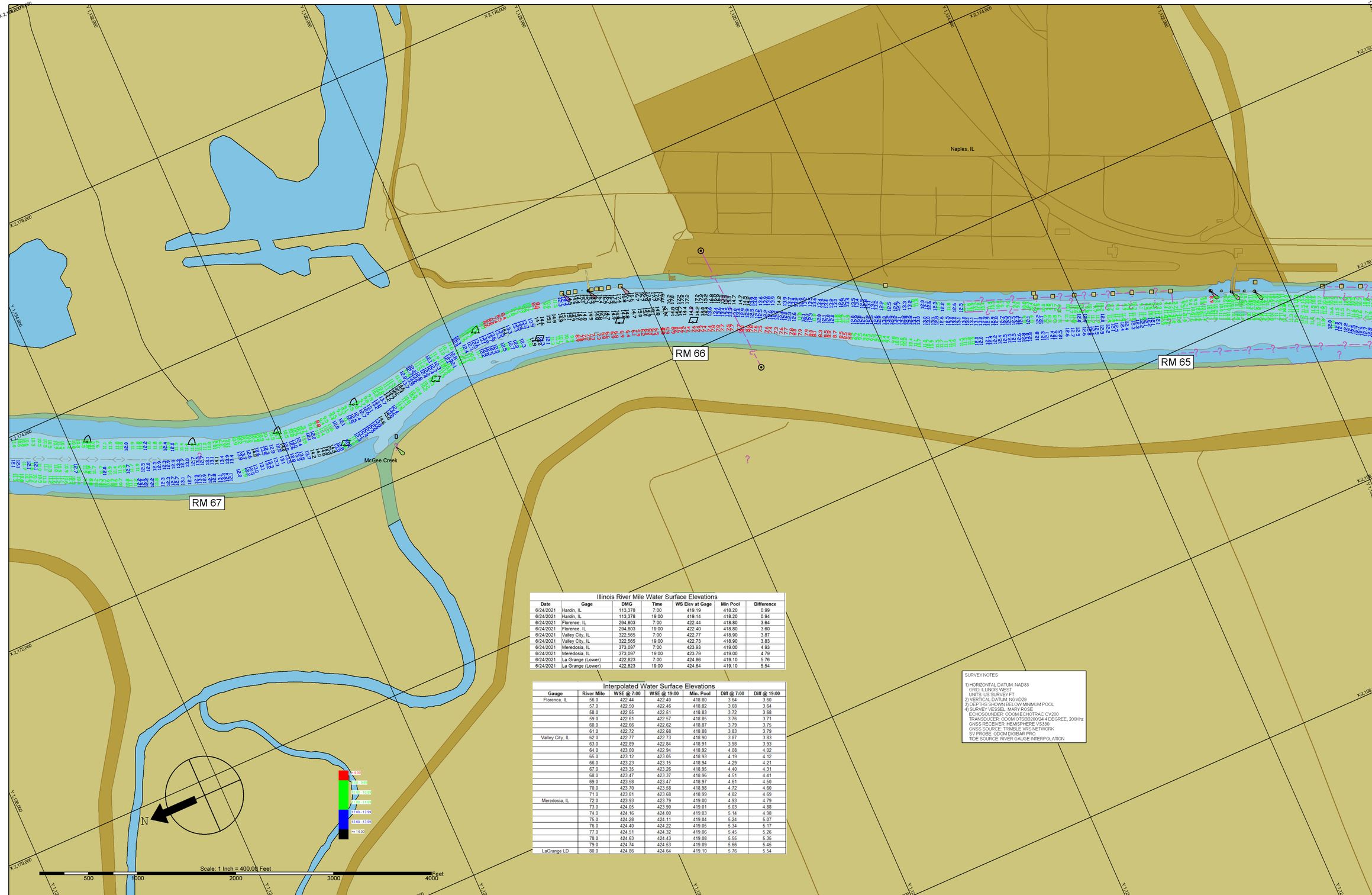
Approved: NAME
FIELD CARTOGRAPHER
Approved: NAME
CIVIL ENGINEERING TECHNICIAN
Approved: NAME
ASST. CHIEF OF SURVEY
Approved: NAME
CHIEF OF SURVEY
Date: JUNE 24, 2021

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY:
SEAWORKS GROUP LLC
185 E MAIN ST STE. 414
BENTON HARBOR, MI 49022

LOWER ILLINOIS RIVER
BASIN
ILLINOIS RIVER
CHANNEL CONDITION SURVEY
MILES 50-75

SHEET NO.
8 OF 13




Illinois River Mile Water Surface Elevations

| Date | Gage | DMG | Time | WS Elev at Gage | Min Pool | Difference |
|---|---|---|---|---|---|---|
| 6/24/2021 | Hardin, IL | 113,378 | 7:00 | 419.19 | 418.20 | 0.99 |
| 6/24/2021 | Hardin, IL | 113,378 | 19:00 | 419.14 | 418.20 | 0.94 |
| 6/24/2021 | Florence, IL | 294,803 | 7:00 | 422.44 | 418.80 | 3.64 |
| 6/24/2021 | Florence, IL | 294,803 | 19:00 | 422.40 | 418.80 | 3.60 |
| 6/24/2021 | Valley City, IL | 322,565 | 7:00 | 422.77 | 418.90 | 3.87 |
| 6/24/2021 | Valley City, IL | 322,565 | 19:00 | 422.73 | 418.90 | 3.83 |
| 6/24/2021 | Meredosia, IL | 373,097 | 7:00 | 423.93 | 419.00 | 4.93 |
| 6/24/2021 | Meredosia, IL | 373,097 | 19:00 | 423.79 | 419.00 | 4.79 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 7:00 | 424.86 | 419.10 | 5.76 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 19:00 | 424.64 | 419.10 | 5.54 |

Interpolated Water Surface Elevations

| Gauge | River Mile | WSE @ 7:00 | WSE @ 19:00 | Min. Pool | Diff @ 7:00 | Diff @ 19:00 |
|---|---|---|---|---|---|---|
| Florence, IL | 56.0 | 422.44 | 422.40 | 418.80 | 3.64 | 3.60 |
| | 57.0 | 422.50 | 422.46 | 418.82 | 3.68 | 3.64 |
| | 58.0 | 422.55 | 422.51 | 418.83 | 3.72 | 3.68 |
| | 59.0 | 422.61 | 422.57 | 418.85 | 3.76 | 3.71 |
| | 60.0 | 422.66 | 422.62 | 418.87 | 3.79 | 3.75 |
| | 61.0 | 422.72 | 422.68 | 418.88 | 3.83 | 3.79 |
| Valley City, IL | 62.0 | 422.77 | 422.73 | 418.90 | 3.87 | 3.83 |
| | 63.0 | 422.89 | 422.84 | 418.91 | 3.98 | 3.93 |
| | 64.0 | 423.00 | 422.94 | 418.92 | 4.08 | 4.02 |
| | 65.0 | 423.12 | 423.05 | 418.93 | 4.19 | 4.12 |
| | 66.0 | 423.23 | 423.15 | 418.94 | 4.29 | 4.21 |
| | 67.0 | 423.35 | 423.26 | 418.95 | 4.40 | 4.31 |
| | 68.0 | 423.47 | 423.37 | 418.96 | 4.51 | 4.41 |
| | 69.0 | 423.58 | 423.47 | 418.97 | 4.61 | 4.50 |
| | 70.0 | 423.70 | 423.58 | 418.98 | 4.72 | 4.60 |
| | 71.0 | 423.81 | 423.68 | 418.99 | 4.82 | 4.69 |
| Meredosia, IL | 72.0 | 423.93 | 423.79 | 419.00 | 4.93 | 4.79 |
| | 73.0 | 424.05 | 423.90 | 419.01 | 5.03 | 4.88 |
| | 74.0 | 424.16 | 424.00 | 419.03 | 5.14 | 4.98 |
| | 75.0 | 424.28 | 424.11 | 419.04 | 5.24 | 5.07 |
| | 76.0 | 424.40 | 424.22 | 419.05 | 5.34 | 5.17 |
| | 77.0 | 424.51 | 424.32 | 419.06 | 5.45 | 5.26 |
| | 78.0 | 424.63 | 424.43 | 419.08 | 5.55 | 5.35 |
| | 79.0 | 424.74 | 424.53 | 419.09 | 5.66 | 5.45 |
| LaGrange LD | 80.0 | 424.86 | 424.64 | 419.10 | 5.76 | 5.54 |

SURVEY NOTES

1) HORIZONTAL DATUM: NAD83
GRID: ILLINOIS WEST
UNITS: US SURVEY FT
2) VERTICAL DATUM: NGVD29
3) DEPTHS SHOWN BELOW MINIMUM POOL
4) SURVEY VESSEL: MARY ROSE
ECHOSOUNDER: ODOM ECHOTRAC CV200
TRANSDUCER: ODOM OTSBB200/24.4 DEGREE, 200Khz
GNSS RECEIVER: HEMISPHERE VS330
GNSS SOURCE: TRIMBLE VRS NETWORK
SV PROBE: ODOM DIGIBAR PRO
TIDE SOURCE: RIVER GAUGE INTERPOLATION

St. Louis District

DATES OF SURVEY:
JUNE 24th 2021

FILE NO.: RM50-75_24x36
REQUEST NO.: ########

SCALE:
1" = 400'

FIELD BOOKS:

Approved: NAME
FIELD CARTOGRAPHER

Approved: NAME
CIVIL ENGINEERING TECHNICIAN

Approved: NAME
ASST. CHIEF OF SURVEY

Approved: NAME
CHIEF OF SURVEY

Date: JUNE 24, 2021

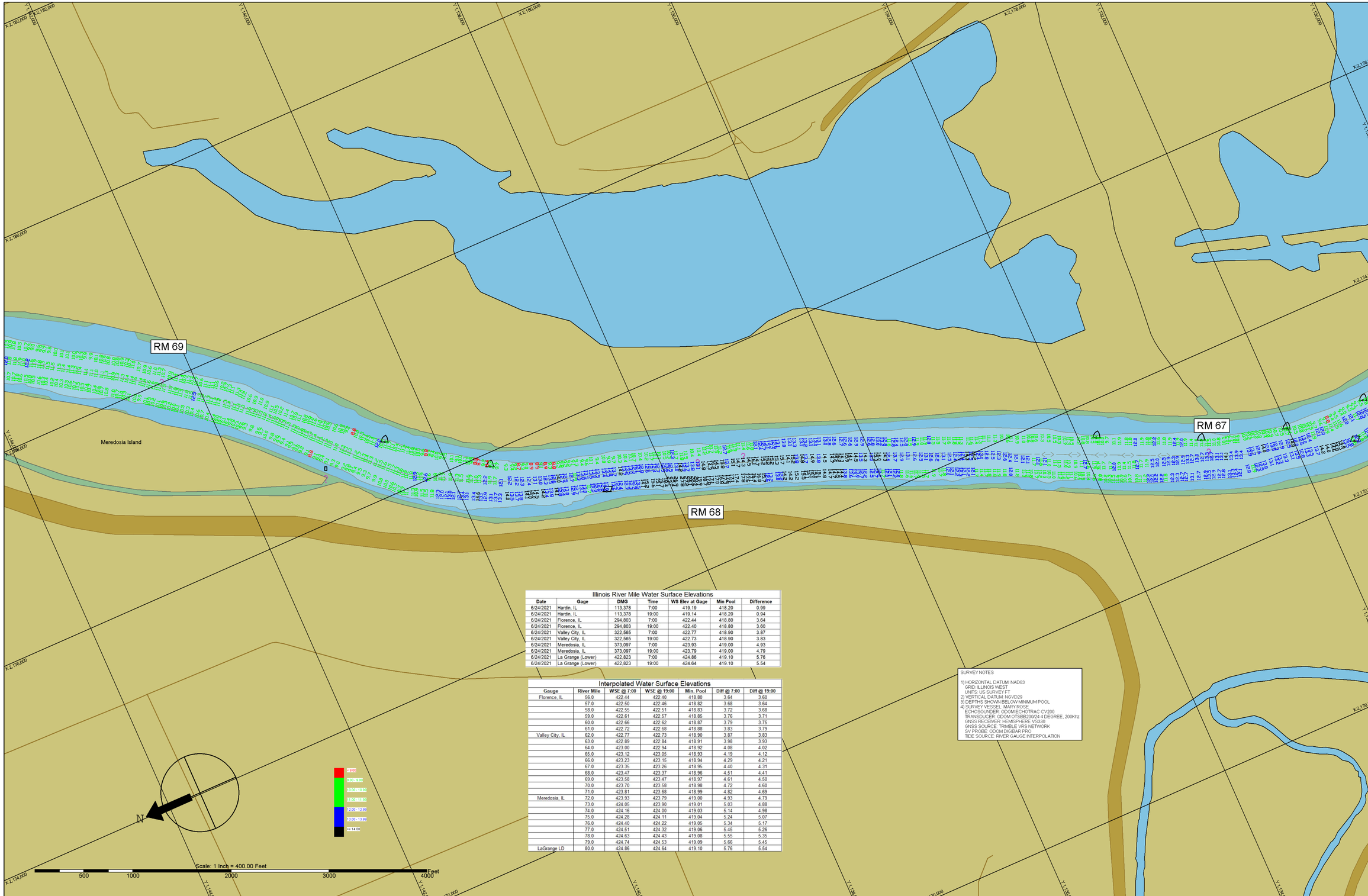
U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY:
SEAWORKS GROUP LLC
185 E MAIN ST STE. 414
BENTON HARBOR, MI 49022

LOWER ILLINOIS RIVER
BASIN
ILLINOIS RIVER

CHANNEL CONDITION SURVEY
MILES 50-75

SHEET NO.
9 OF 13




Illinois River Mile Water Surface Elevations

| Date | Gage | DMG | Time | WS Elev at Gage | Min Pool | Difference |
|---|---|---|---|---|---|---|
| 6/24/2021 | Hardin, IL | 113,378 | 7:00 | 419.19 | 418.20 | 0.99 |
| 6/24/2021 | Hardin, IL | 113,378 | 19:00 | 419.14 | 418.20 | 0.94 |
| 6/24/2021 | Florence, IL | 294,803 | 7:00 | 422.44 | 418.80 | 3.64 |
| 6/24/2021 | Florence, IL | 294,803 | 19:00 | 422.40 | 418.80 | 3.60 |
| 6/24/2021 | Valley City, IL | 322,565 | 7:00 | 422.77 | 418.90 | 3.87 |
| 6/24/2021 | Valley City, IL | 322,565 | 19:00 | 422.73 | 418.90 | 3.83 |
| 6/24/2021 | Meredosia, IL | 373,097 | 7:00 | 423.93 | 419.00 | 4.93 |
| 6/24/2021 | Meredosia, IL | 373,097 | 19:00 | 423.79 | 419.00 | 4.79 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 7:00 | 424.86 | 419.10 | 5.76 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 19:00 | 424.64 | 419.10 | 5.54 |

Interpolated Water Surface Elevations

| Gauge | River Mile | WSE @ 7:00 | WSE @ 19:00 | Min. Pool | Diff @ 7:00 | Diff @ 19:00 |
|---|---|---|---|---|---|---|
| Florence, IL | 56.0 | 422.44 | 422.40 | 418.80 | 3.64 | 3.60 |
| | 57.0 | 422.50 | 422.46 | 418.82 | 3.68 | 3.64 |
| | 58.0 | 422.55 | 422.51 | 418.83 | 3.72 | 3.68 |
| | 59.0 | 422.61 | 422.57 | 418.85 | 3.76 | 3.71 |
| | 60.0 | 422.66 | 422.62 | 418.87 | 3.79 | 3.75 |
| | 61.0 | 422.72 | 422.68 | 418.88 | 3.83 | 3.79 |
| Valley City, IL | 62.0 | 422.77 | 422.73 | 418.90 | 3.87 | 3.83 |
| | 63.0 | 422.89 | 422.84 | 418.91 | 3.98 | 3.93 |
| | 64.0 | 423.00 | 422.94 | 418.92 | 4.08 | 4.02 |
| | 65.0 | 423.12 | 423.05 | 418.93 | 4.19 | 4.12 |
| | 66.0 | 423.23 | 423.15 | 418.94 | 4.29 | 4.21 |
| | 67.0 | 423.35 | 423.26 | 418.95 | 4.40 | 4.31 |
| | 68.0 | 423.47 | 423.37 | 418.96 | 4.51 | 4.41 |
| | 69.0 | 423.58 | 423.47 | 418.97 | 4.61 | 4.50 |
| | 70.0 | 423.70 | 423.58 | 418.98 | 4.72 | 4.60 |
| | 71.0 | 423.81 | 423.68 | 418.99 | 4.82 | 4.69 |
| Meredosia, IL | 72.0 | 423.93 | 423.79 | 419.00 | 4.93 | 4.79 |
| | 73.0 | 424.05 | 423.90 | 419.01 | 5.03 | 4.88 |
| | 74.0 | 424.16 | 424.00 | 419.03 | 5.14 | 4.98 |
| | 75.0 | 424.28 | 424.11 | 419.04 | 5.24 | 5.07 |
| | 76.0 | 424.40 | 424.22 | 419.05 | 5.34 | 5.17 |
| | 77.0 | 424.51 | 424.32 | 419.06 | 5.45 | 5.26 |
| | 78.0 | 424.63 | 424.43 | 419.08 | 5.55 | 5.35 |
| | 79.0 | 424.74 | 424.53 | 419.09 | 5.66 | 5.45 |
| LaGrange LD | 80.0 | 424.86 | 424.64 | 419.10 | 5.76 | 5.54 |

SURVEY NOTES

1) HORIZONTAL DATUM: NAD83
GRID: ILLINOIS WEST
UNITS: US SURVEY FT
2) VERTICAL DATUM: NGVD29
3) DEPTHS SHOWN BELOW MINIMUM POOL
4) SURVEY VESSEL: MARY ROSE
ECHOSOUNDER: ODOM ECHOTRAC CV200
TRANSDUCER: ODOM OTSBB200/24 4 DEGREE, 200Khz
GNSS RECEIVER: HEMISPHERE VS330
GNSS SOURCE: TRIMBLE VRS NETWORK
SV PROBE: ODOM DIGIBAR PRO
TIDE SOURCE: RIVER GAUGE INTERPOLATION

St. Louis District

DATES OF SURVEY:
JUNE 24th 2021

SCALE:
1" = 400'

FIELD BOOKS:

FILE NO.: RM50-75_24x36
REQUEST NO.: ########

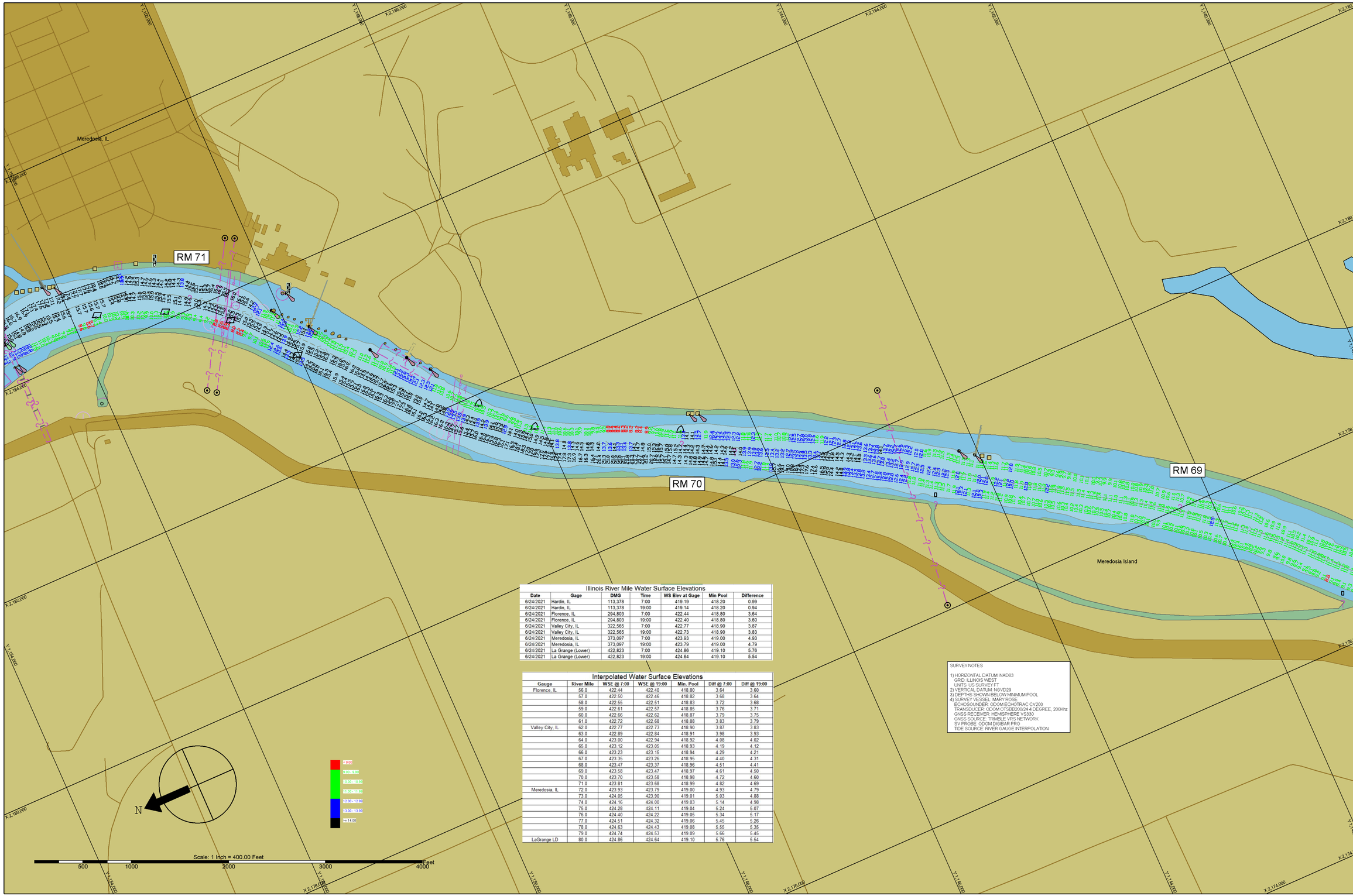
Approved: NAME
FIELD CARTOGRAPHER
Approved: NAME
CIVIL ENGINEERING TECHNICIAN
Approved: NAME
ASST. CHIEF OF SURVEY
Approved: NAME
CHIEF OF SURVEY
Date: JUNE 24, 2021

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY:
SEAWORKS GROUP LLC
185 E MAIN ST STE. 414
BENTON HARBOR, MI 49022

LOWER ILLINOIS RIVER
BASIN
ILLINOIS RIVER
CHANNEL CONDITION SURVEY
MILES 50-75

SHEET NO.
10 OF 13




Illinois River Mile Water Surface Elevations

| Date | Gage | DMG | Time | WS Elev at Gage | Min Pool | Difference |
|---|---|---|---|---|---|---|
| 6/24/2021 | Hardin, IL | 113,378 | 7:00 | 419.19 | 418.20 | 0.99 |
| 6/24/2021 | Hardin, IL | 113,378 | 19:00 | 419.14 | 418.20 | 0.94 |
| 6/24/2021 | Florence, IL | 294,803 | 7:00 | 422.44 | 418.80 | 3.64 |
| 6/24/2021 | Florence, IL | 294,803 | 19:00 | 422.40 | 418.80 | 3.60 |
| 6/24/2021 | Valley City, IL | 322,565 | 7:00 | 422.77 | 418.90 | 3.87 |
| 6/24/2021 | Valley City, IL | 322,565 | 19:00 | 422.73 | 418.90 | 3.83 |
| 6/24/2021 | Meredosia, IL | 373,097 | 7:00 | 423.93 | 419.00 | 4.93 |
| 6/24/2021 | Meredosia, IL | 373,097 | 19:00 | 423.79 | 419.00 | 4.79 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 7:00 | 424.86 | 419.10 | 5.76 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 19:00 | 424.64 | 419.10 | 5.54 |

Interpolated Water Surface Elevations

| Gauge | River Mile | WSE @ 7:00 | WSE @ 19:00 | Min. Pool | Diff @ 7:00 | Diff @ 19:00 |
|---|---|---|---|---|---|---|
| Florence, IL | 56.0 | 422.44 | 422.40 | 418.80 | 3.64 | 3.60 |
| | 57.0 | 422.50 | 422.46 | 418.82 | 3.68 | 3.64 |
| | 58.0 | 422.55 | 422.51 | 418.83 | 3.72 | 3.68 |
| | 59.0 | 422.61 | 422.57 | 418.85 | 3.76 | 3.71 |
| | 60.0 | 422.66 | 422.62 | 418.87 | 3.79 | 3.75 |
| | 61.0 | 422.72 | 422.68 | 418.88 | 3.83 | 3.79 |
| Valley City, IL | 62.0 | 422.77 | 422.73 | 418.90 | 3.87 | 3.83 |
| | 63.0 | 422.89 | 422.84 | 418.91 | 3.98 | 3.93 |
| | 64.0 | 423.00 | 422.94 | 418.92 | 4.08 | 4.02 |
| | 65.0 | 423.12 | 423.05 | 418.93 | 4.19 | 4.12 |
| | 66.0 | 423.23 | 423.15 | 418.94 | 4.29 | 4.21 |
| | 67.0 | 423.35 | 423.26 | 418.95 | 4.40 | 4.31 |
| | 68.0 | 423.47 | 423.37 | 418.96 | 4.51 | 4.41 |
| | 69.0 | 423.58 | 423.47 | 418.97 | 4.61 | 4.50 |
| | 70.0 | 423.70 | 423.58 | 418.98 | 4.72 | 4.60 |
| | 71.0 | 423.81 | 423.68 | 418.99 | 4.82 | 4.69 |
| Meredosia, IL | 72.0 | 423.93 | 423.79 | 419.00 | 4.93 | 4.79 |
| | 73.0 | 424.05 | 423.90 | 419.01 | 5.03 | 4.88 |
| | 74.0 | 424.16 | 424.00 | 419.03 | 5.14 | 4.98 |
| | 75.0 | 424.28 | 424.11 | 419.04 | 5.24 | 5.07 |
| | 76.0 | 424.40 | 424.22 | 419.05 | 5.34 | 5.17 |
| | 77.0 | 424.51 | 424.32 | 419.06 | 5.45 | 5.26 |
| | 78.0 | 424.63 | 424.43 | 419.08 | 5.55 | 5.35 |
| | 79.0 | 424.74 | 424.53 | 419.09 | 5.66 | 5.45 |
| LaGrange LD | 80.0 | 424.86 | 424.64 | 419.10 | 5.76 | 5.54 |

SURVEY NOTES

1) HORIZONTAL DATUM: NAD83
GRID: ILLINOIS WEST
UNITS: US SURVEY FT
2) VERTICAL DATUM: NGVD29
3) DEPTHS SHOWN BELOW MINIMUM POOL
4) SURVEY VESSEL: MARY ROSE
ECHOSOUNDER: ODOM ECHOTRAC CV200
TRANSDUCER: ODOM 0TSBB206V24 4 DEGREE, 200khz
GNSS RECEIVER: HEMISPHERE VS330
GNSS SOURCE: TRIMBLE VRS NETWORK
SV PROBE: ODOM DIGIBAR PRO
TIDE SOURCE: RIVER GAUGE INTERPOLATION

St. Louis District

DATES OF SURVEY:
JUNE 24th 2021

FILE NO.: RM50-75_24x36
REQUEST NO.: ########

SCALE:
1" = 400'

FIELD BOOKS:

Approved: NAME
FIELD CARTOGRAPHER

Approved: NAME
CIVIL ENGINEERING TECHNICIAN

Approved: NAME
ASST. CHIEF OF SURVEY

Approved: NAME
CHIEF OF SURVEY

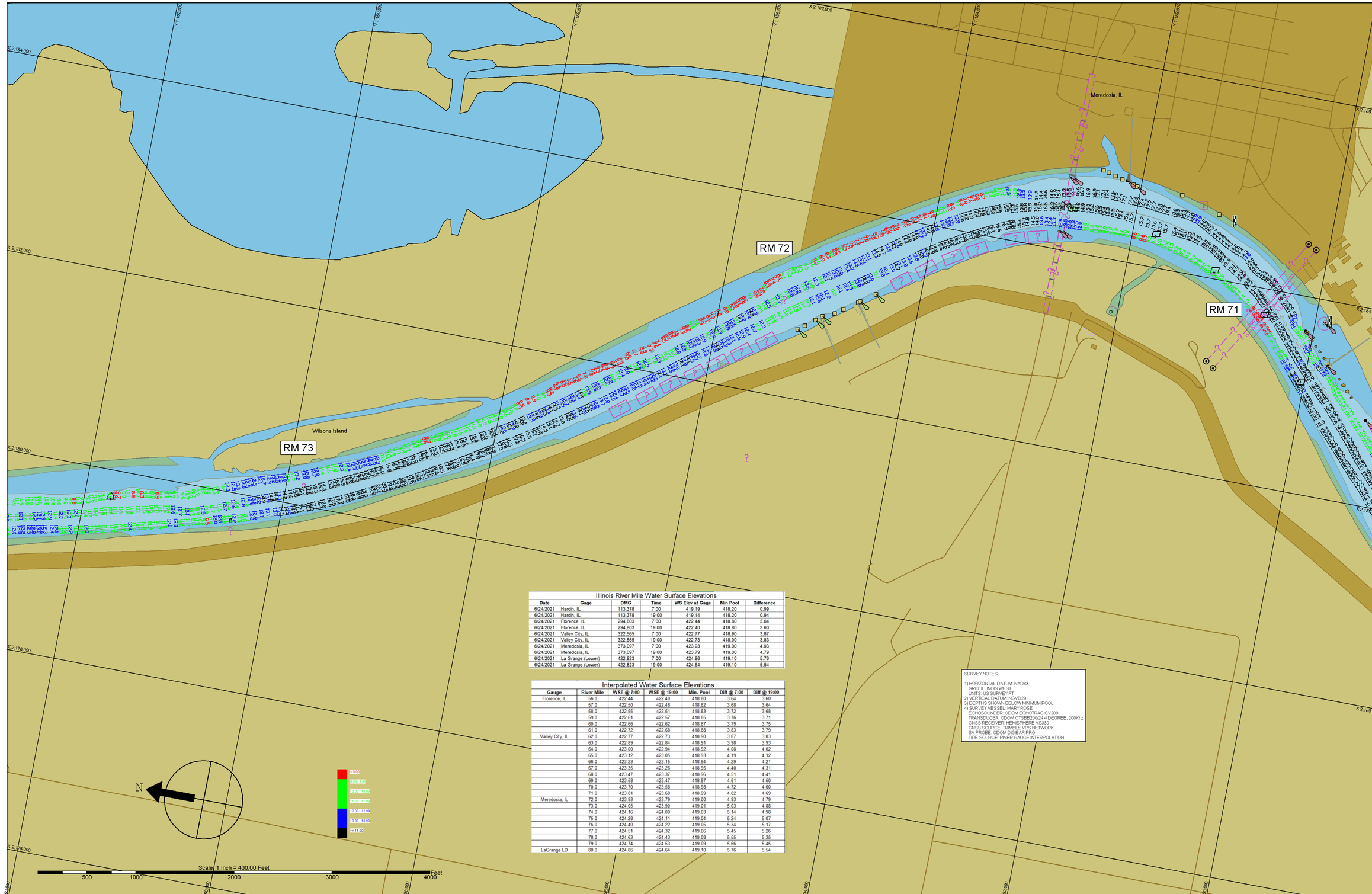
Date: JUNE 24, 2021

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY:
SEAWORKS GROUP, LLC
185 E MAIN ST STE. 414
BENTON HARBOR, MI 49022

LOWER ILLINOIS RIVER
BASIN
ILLINOIS RIVER
CHANNEL CONDITION SURVEY
MILES 50-75

SHEET NO.




Illinois River Mile Water Surface Elevations

| Date | Gage | DMG | Time | WS Elev at Gage | Min Pool | Difference |
|---|---|---|---|---|---|---|
| 6/24/2021 | Hardin, IL | 113,378 | 7:00 | 419.19 | 418.20 | 0.99 |
| 6/24/2021 | Hardin, IL | 113,378 | 19:00 | 419.14 | 418.20 | 0.94 |
| 6/24/2021 | Florence, IL | 294,803 | 7:00 | 422.44 | 418.80 | 3.64 |
| 6/24/2021 | Florence, IL | 294,803 | 19:00 | 422.40 | 418.80 | 3.60 |
| 6/24/2021 | Valley City, IL | 322,565 | 7:00 | 422.77 | 418.90 | 3.87 |
| 6/24/2021 | Valley City, IL | 322,565 | 19:00 | 422.73 | 418.90 | 3.83 |
| 6/24/2021 | Meredosia, IL | 373,097 | 7:00 | 423.93 | 419.00 | 4.93 |
| 6/24/2021 | Meredosia, IL | 373,097 | 19:00 | 423.79 | 419.00 | 4.79 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 7:00 | 424.86 | 419.10 | 5.76 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 19:00 | 424.64 | 419.10 | 5.54 |

Interpolated Water Surface Elevations

| Gauge | River Mile | WSE @ 7:00 | WSE @ 19:00 | Min. Pool | Diff @ 7:00 | Diff @ 19:00 |
|---|---|---|---|---|---|---|
| Florence, IL | 56.0 | 422.44 | 422.40 | 418.80 | 3.64 | 3.60 |
| | 57.0 | 422.50 | 422.46 | 418.82 | 3.68 | 3.64 |
| | 58.0 | 422.55 | 422.51 | 418.83 | 3.72 | 3.68 |
| | 59.0 | 422.61 | 422.57 | 418.85 | 3.76 | 3.71 |
| | 60.0 | 422.66 | 422.62 | 418.87 | 3.79 | 3.75 |
| | 61.0 | 422.72 | 422.68 | 418.88 | 3.83 | 3.79 |
| Valley City, IL | 62.0 | 422.77 | 422.73 | 418.90 | 3.87 | 3.83 |
| | 63.0 | 422.89 | 422.84 | 418.91 | 3.98 | 3.93 |
| | 64.0 | 423.00 | 422.94 | 418.92 | 4.08 | 4.02 |
| | 65.0 | 423.12 | 423.05 | 418.93 | 4.19 | 4.12 |
| | 66.0 | 423.23 | 423.15 | 418.94 | 4.29 | 4.21 |
| | 67.0 | 423.35 | 423.26 | 418.95 | 4.40 | 4.31 |
| | 68.0 | 423.47 | 423.37 | 418.96 | 4.51 | 4.41 |
| | 69.0 | 423.58 | 423.47 | 418.97 | 4.61 | 4.50 |
| | 70.0 | 423.70 | 423.58 | 418.98 | 4.72 | 4.60 |
| | 71.0 | 423.81 | 423.68 | 418.99 | 4.82 | 4.69 |
| Meredosia, IL | 72.0 | 423.93 | 423.79 | 419.00 | 4.93 | 4.79 |
| | 73.0 | 424.05 | 423.90 | 419.01 | 5.03 | 4.88 |
| | 74.0 | 424.16 | 424.00 | 419.03 | 5.14 | 4.98 |
| | 75.0 | 424.28 | 424.11 | 419.04 | 5.24 | 5.07 |
| | 76.0 | 424.40 | 424.22 | 419.05 | 5.34 | 5.17 |
| | 77.0 | 424.51 | 424.32 | 419.06 | 5.45 | 5.26 |
| | 78.0 | 424.63 | 424.43 | 419.08 | 5.55 | 5.35 |
| | 79.0 | 424.74 | 424.53 | 419.09 | 5.66 | 5.45 |
| LaGrange LD | 80.0 | 424.86 | 424.64 | 419.10 | 5.76 | 5.54 |

SURVEY NOTES

1) HORIZONTAL DATUM: NAD83
GRID: ILLINOIS WEST
UNITS: US SURVEY FT
2) VERTICAL DATUM: NGVD29
3) DEPTHS SHOWN BELOW MINIMUM POOL
4) SURVEY VESSEL: MARY ROSE
ECHOSOUNDER: ODOM ECHOTRAC CV200
TRANSDUCER: ODOM OTSBB200/24 4 DEGREE, 200Khz
GNSS RECEIVER: HEMISPHERE VS330
GNSS SOURCE: TRIMBLE VRS NETWORK
SV PROBE: ODOM DIGIBAR PRO
TIDE SOURCE: RIVER GAUGE INTERPOLATION

St. Louis District

DATES OF SURVEY:
JUNE 24th 2021

SCALE:
1" = 400'

FIELD BOOKS:

FILE NO.: RM50-75_24x36
REQUEST NO.: ########

Approved: NAME
FIELD CARTOGRAPHER

Approved: NAME
CIVIL ENGINEERING TECHNICIAN

Approved: NAME
ASST. CHIEF OF SURVEY

Approved: NAME
CHIEF OF SURVEY

Date: JUNE 24, 2021

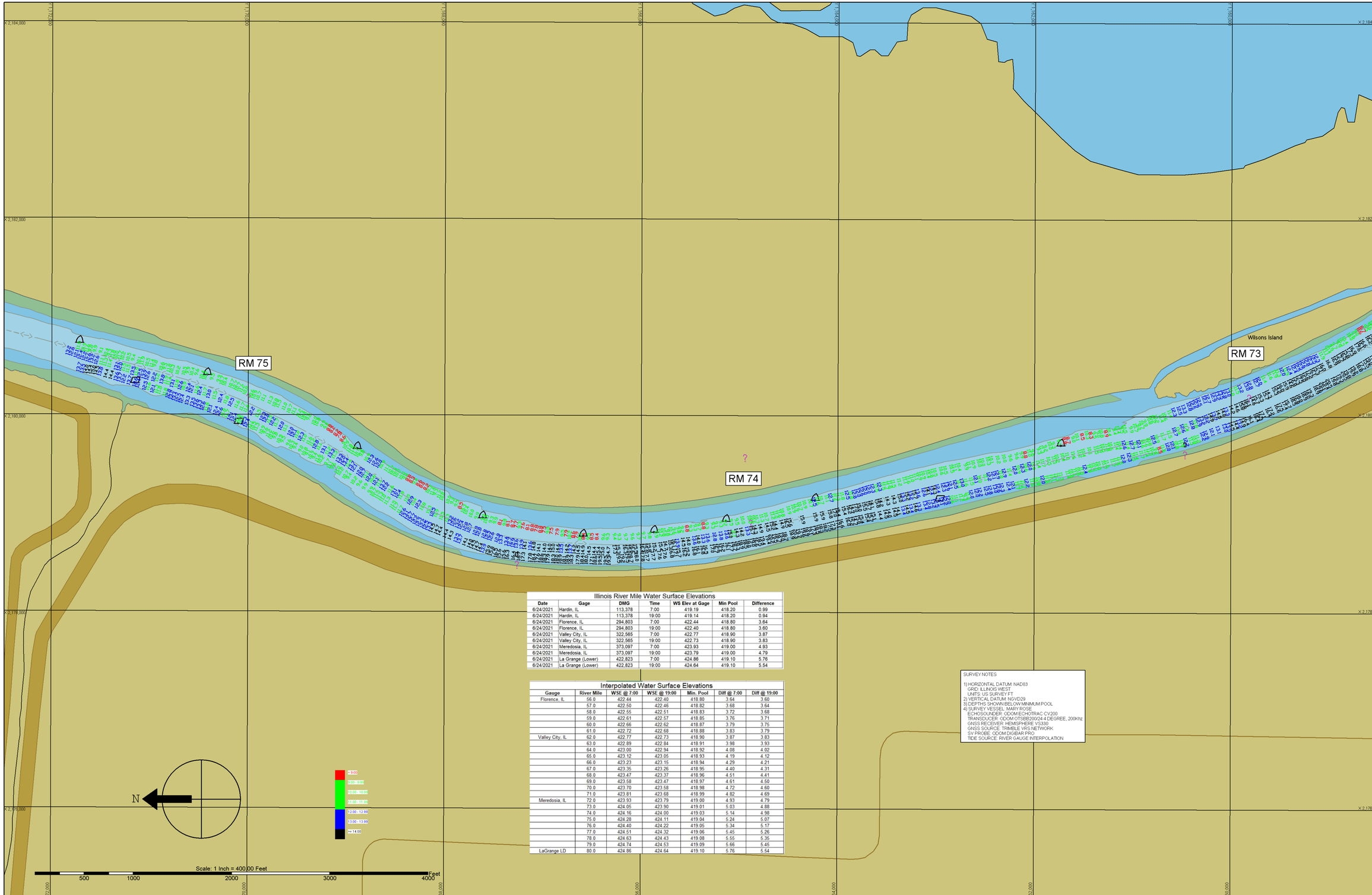
U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY:
SEAWORKS GROUP LLC
165 E MAIN ST STE. 414
BENTON HARBOR, MI 49022

LOWER ILLINOIS RIVER
BASIN
ILLINOIS RIVER
CHANNEL CONDITION SURVEY
MILES 50-75

SHEET NO.

12 OF 13




Illinois River Mile Water Surface Elevations

| Date | Gage | DMG | Time | WS Elev at Gage | Min Pool | Difference |
|---|---|---|---|---|---|---|
| 6/24/2021 | Hardin, IL | 113,378 | 7:00 | 419.19 | 418.20 | 0.99 |
| 6/24/2021 | Hardin, IL | 113,378 | 19:00 | 419.14 | 418.20 | 0.94 |
| 6/24/2021 | Florence, IL | 294,803 | 7:00 | 422.44 | 418.80 | 3.64 |
| 6/24/2021 | Florence, IL | 294,803 | 19:00 | 422.40 | 418.80 | 3.60 |
| 6/24/2021 | Valley City, IL | 322,565 | 7:00 | 422.77 | 418.90 | 3.87 |
| 6/24/2021 | Valley City, IL | 322,565 | 19:00 | 422.73 | 418.90 | 3.83 |
| 6/24/2021 | Meredosia, IL | 373,097 | 7:00 | 423.93 | 419.00 | 4.93 |
| 6/24/2021 | Meredosia, IL | 373,097 | 19:00 | 423.79 | 419.00 | 4.79 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 7:00 | 424.86 | 419.10 | 5.76 |
| 6/24/2021 | La Grange (Lower) | 422,823 | 19:00 | 424.64 | 419.10 | 5.54 |

Interpolated Water Surface Elevations

| Gauge | River Mile | WSE @ 7:00 | WSE @ 19:00 | Min. Pool | Diff @ 7:00 | Diff @ 19:00 |
|---|---|---|---|---|---|---|
| Florence, IL | 56.0 | 422.44 | 422.40 | 418.80 | 3.64 | 3.60 |
| | 57.0 | 422.50 | 422.46 | 418.82 | 3.68 | 3.64 |
| | 58.0 | 422.55 | 422.51 | 418.83 | 3.72 | 3.68 |
| | 59.0 | 422.61 | 422.57 | 418.85 | 3.76 | 3.71 |
| | 60.0 | 422.66 | 422.62 | 418.87 | 3.79 | 3.75 |
| | 61.0 | 422.72 | 422.68 | 418.88 | 3.83 | 3.79 |
| Valley City, IL | 62.0 | 422.77 | 422.73 | 418.90 | 3.87 | 3.83 |
| | 63.0 | 422.89 | 422.84 | 418.91 | 3.98 | 3.93 |
| | 64.0 | 423.00 | 422.94 | 418.92 | 4.08 | 4.02 |
| | 65.0 | 423.12 | 423.05 | 418.93 | 4.19 | 4.12 |
| | 66.0 | 423.23 | 423.15 | 418.94 | 4.29 | 4.21 |
| | 67.0 | 423.35 | 423.26 | 418.95 | 4.40 | 4.31 |
| | 68.0 | 423.47 | 423.37 | 418.96 | 4.51 | 4.41 |
| | 69.0 | 423.58 | 423.47 | 418.97 | 4.61 | 4.50 |
| | 70.0 | 423.70 | 423.58 | 418.98 | 4.72 | 4.60 |
| | 71.0 | 423.81 | 423.68 | 418.99 | 4.82 | 4.69 |
| Meredosia, IL | 72.0 | 423.93 | 423.79 | 419.00 | 4.93 | 4.79 |
| | 73.0 | 424.05 | 423.90 | 419.01 | 5.03 | 4.88 |
| | 74.0 | 424.16 | 424.00 | 419.03 | 5.14 | 4.98 |
| | 75.0 | 424.28 | 424.11 | 419.04 | 5.24 | 5.07 |
| | 76.0 | 424.40 | 424.22 | 419.05 | 5.34 | 5.17 |
| | 77.0 | 424.51 | 424.32 | 419.06 | 5.45 | 5.26 |
| | 78.0 | 424.63 | 424.43 | 419.08 | 5.55 | 5.35 |
| | 79.0 | 424.74 | 424.53 | 419.09 | 5.66 | 5.45 |
| LaGrange LD | 80.0 | 424.86 | 424.64 | 419.10 | 5.76 | 5.54 |

SURVEY NOTES

1) HORIZONTAL DATUM: NAD83
GRID: ILLINOIS WEST
UNITS: US SURVEY FT
2) VERTICAL DATUM: NGVD29
3) DEPTHS SHOWN BELOW MINIMUM POOL
4) SURVEY VESSEL: MARY ROSE
ECHOSOUNDER: ODOM ECHOTRAC CV200
TRANSDUCER: ODOM 0TSBB200/24.4 DEGREE, 200Khz
GNSS RECEIVER: HEMISPHERE VS330
GNSS SOURCE: TRIMBLE VRS NETWORK
SV PROBE: ODOM DIGIBAR PRO
TIDE SOURCE: RIVER GAUGE INTERPOLATION

St. Louis District

DATES OF SURVEY:
JUNE 24th 2021

FILE NO.: RM50-75_24x36
REQUEST NO.: ########

SCALE:
1" = 400'

FIELD BOOKS:

Approved: NAME
FIELD CARTOGRAPHER

Approved: NAME
CIVIL ENGINEERING TECHNICIAN

Approved: NAME
ASST. CHIEF OF SURVEY

Approved: NAME
CHIEF OF SURVEY

Date: JUNE 24, 2021

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY:
SEAWORKS GROUP LLC
185 E MAIN ST STE. 414
BENTON HARBOR, MI 49022

LOWER ILLINOIS RIVER
BASIN
ILLINOIS RIVER
CHANNEL CONDITION SURVEY
MILES 50-75

SHEET NO.
13 OF 13