



US Army Corps
of Engineers
Chicago District

Indiana Harbor and Canal Sediment Volume

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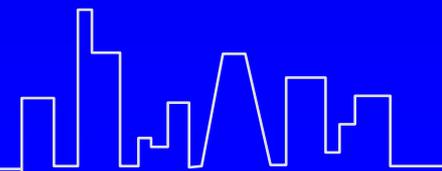




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Overview

- **Indiana Harbor and Canal**
- **Data Collection & Calculations**
- **Current Status**
- **Future Process**





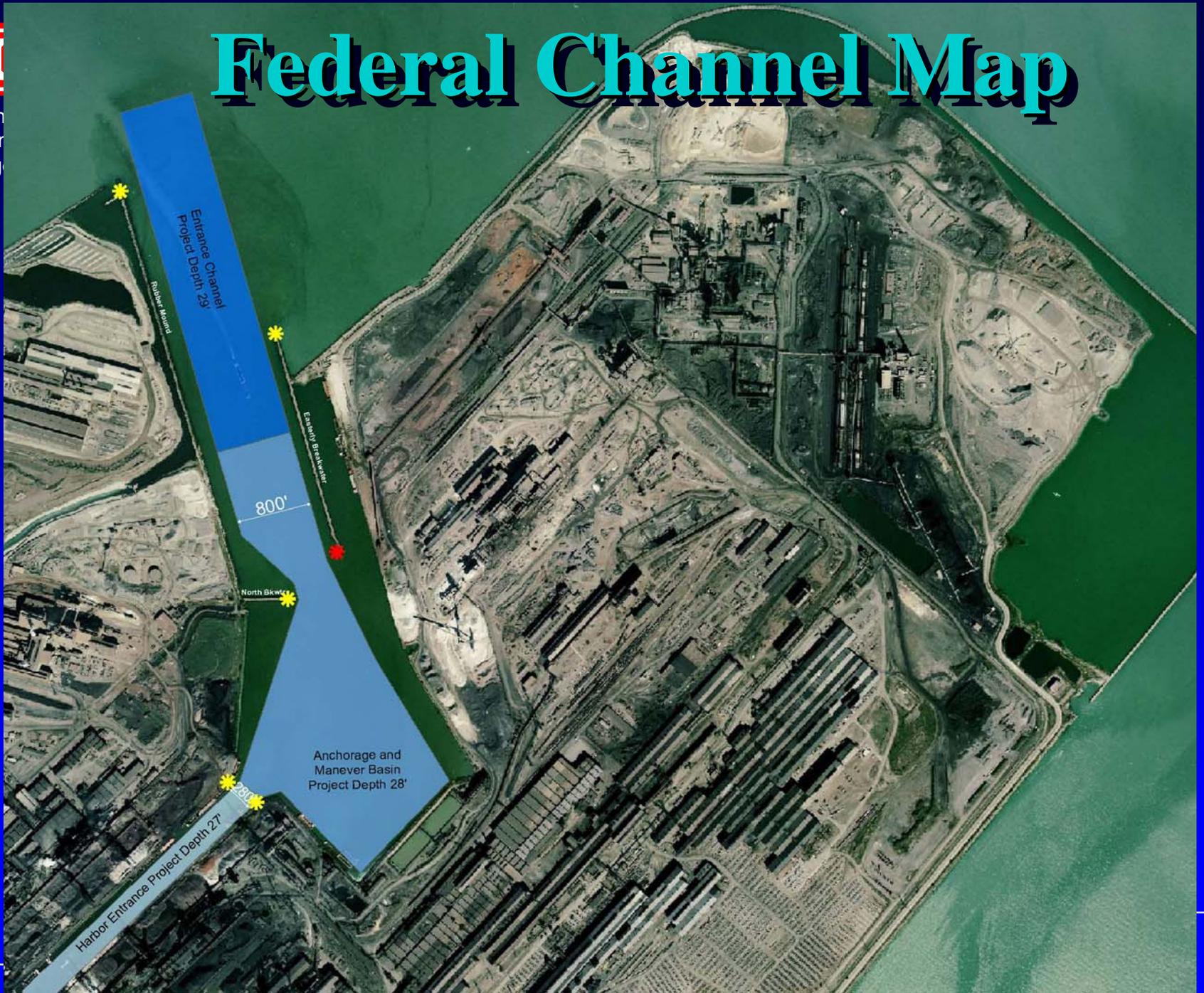
Indiana Harbor and Canal





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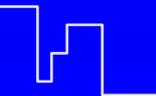
Federal Channel Map





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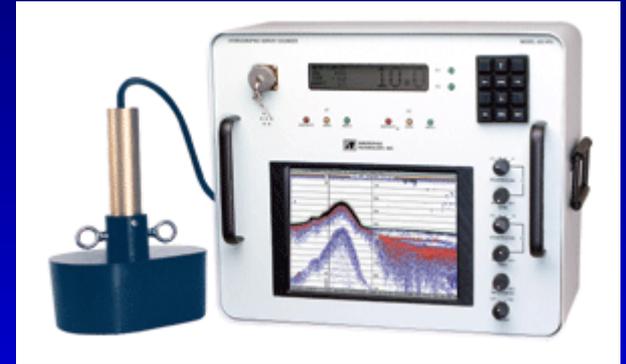
Federal Channel Map





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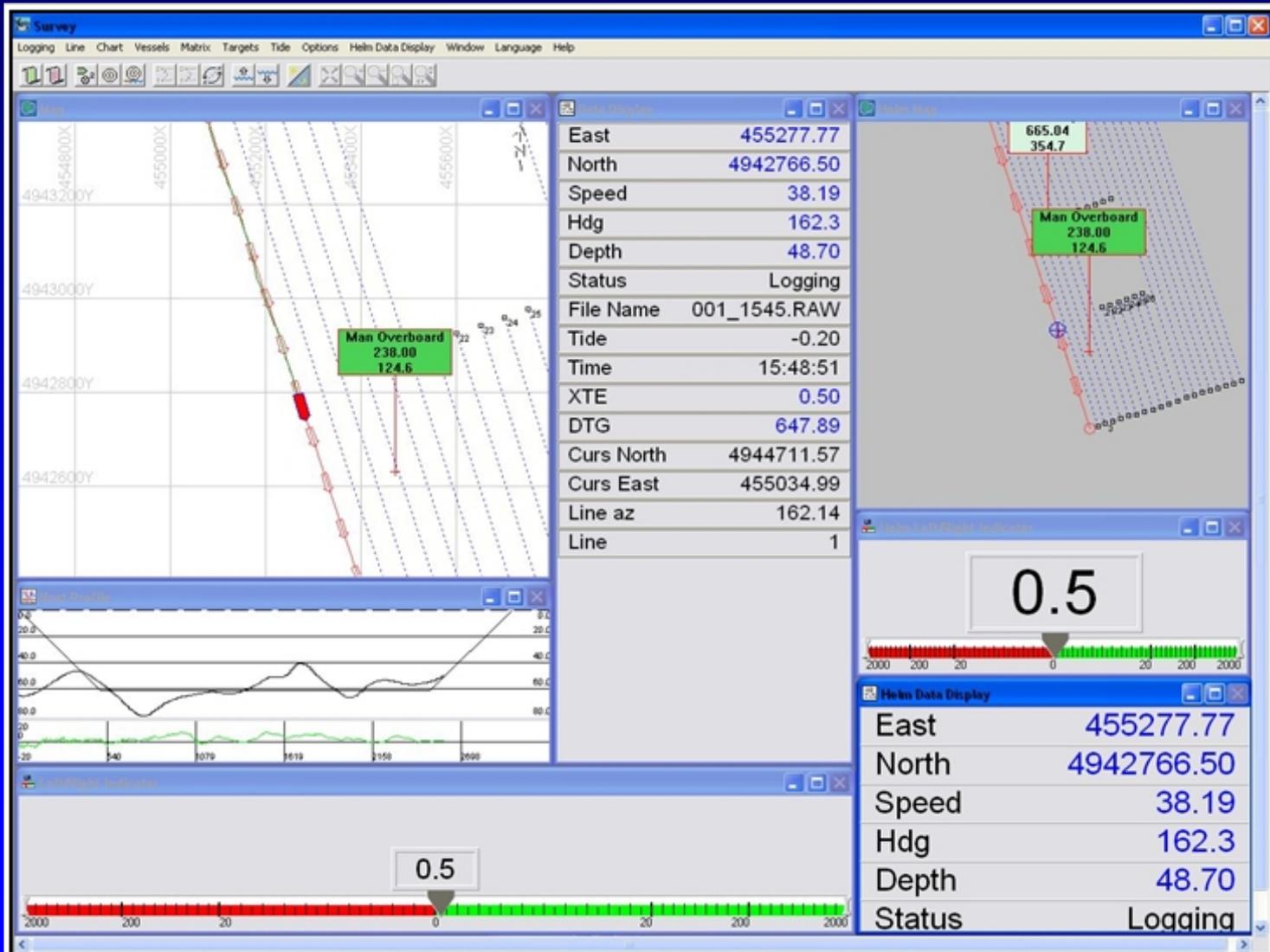
Hydrographic Surveys





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Survey Software





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Survey Software

The screenshot displays the Survey Software interface with several windows open:

- Spread Sheet:** A table with 11 rows of data. The columns are Record, Time, Draft Cor, Num Sats, Heave, GPS Elevate, X, Y, and Raw Depth.
- Survey Window:** A 2D plot showing a track line with a color scale from 0.0 to 29.0.
- Pitch, Roll and Heading:** Three line graphs showing Pitch, Roll, and Heading over time.
- Sound Velocity Profile:** A graph showing Velocity vs. Depth.
- Profile Window:** Two graphs: Track Line - DOL vs DBL and Profile - Depth vs DBL.

Record	Time	Draft Cor	Num Sats	Heave	GPS Elevate	X	Y	Raw Depth
1	13:10:01.32	0.0	0	0.0	0.0	414587.6	1057788.6	7.4
2	13:10:01.43	0.0	0	0.0	0.0	414587.3	1057788.7	7.4
3	13:10:01.54	0.0	0	0.0	0.0	414587.1	1057788.9	7.5
4	13:10:01.65	0.0	0	0.0	0.0	414586.9	1057789.1	7.5
5	13:10:01.76	0.0	0	0.0	0.0	414586.6	1057789.2	7.5
6	13:10:01.87	0.0	0	0.0	0.0	414586.4	1057789.4	7.6
7	13:10:01.98	0.0	0	0.0	0.0	414586.2	1057789.5	7.6
8	13:10:02.09	0.0	0	0.0	0.0	414585.9	1057789.7	7.7
9	13:10:02.25	0.0	0	0.0	0.0	414585.6	1057789.9	7.7
10	13:10:02.36	0.0	0	0.0	0.0	414585.3	1057790.0	7.7
11	13:10:02.47	0.0	0	0.0	0.0	414585.1	1057790.1	7.8

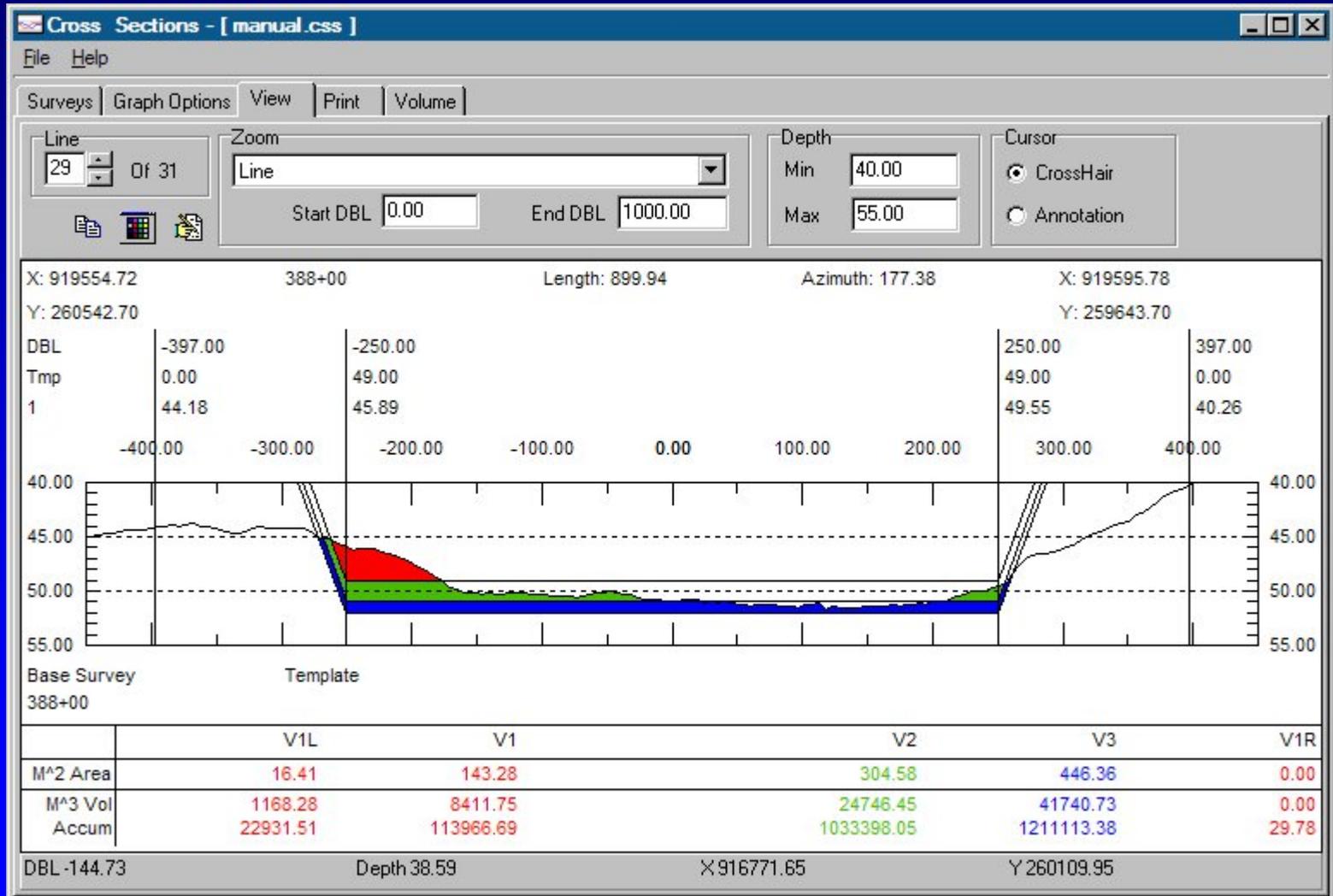
Windows visible: Single Beam Max - B1b.log - July12stlouis.tid, Survey Window, Pitch, Roll and Heading, Spread Sheet, Profile Window, Sound Velocity Profile, Tide and Draft Corrections.

System tray: start, Microsoft PowerPoint..., Hypack_Max 02.12, Paint Shop Pro, Single Beam Editor, 1:19 PM



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Volume Calculation





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Future Process

- **Delineate Dredging Areas**
- **Perform Pre-Dredge Survey**
- **Determine Fed & Non-Fed**
- **Dredge**
- **Post-Dredge Survey**



Area	Authorized Federal Channel		Width	
	Authorized	Recommended	Authorized	Recommended
1	29	29	3200	1600
2	28	28	3000	1500
3	27	27	290	290

Questions?

