DREDGE STATISTICS

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HYPACK® DREDGE STATISTICS computes statistical information from pre- and post-dredge survey data. It presents the results in a histogram format that will allow you to analyze a data set. You can find this program in the UTILITY-DREDGING UTILITIES menu.

DREDGE STATISTICS can accept pre-survey XYZ, Edited All or HS2 data. After loading your pre- and post-survey data, you will define the area in which the calculations will take effect in the Area Limits field. The data can be limited with a Border (*.BRD), Planned Line (*.LNW) or a Matrix (*.MTX) file. This will clip the data set and only calculate the area defined by the Area Limits file.

In the following example, there are two XYZ files loaded: one for the pre-dredge and another for the post-dredge survey. The data has been limited by an LNW file and reaches by stations can be adjusted to define only certain parts of the channel in the Start Line and End Line fields.

The **standard deviation** shows how much variation or "dispersion" there is from the average depths in the full data set: pre-dredge and postdredge. distribution of this data in the data set range. The

The **sigmas** in the histogram give you lines agains which you can analyze where most of the depths fall in the range of the data set as a whole. The top and bottom 1 Sigma lines represents the 30% of the data and the 2 Sigmas represent 60%.

The DREDGE STATISTICS program can be handy if you want a quick look at where the depths fall after the dredging process has taken place and how efficient the process was. More often than not, it quickly shows how much material was overderedged as non-pay material!

FIGURE 1. *Sample Pre- vs Post-dredge Comparison in DREDGE STATISTICS*