



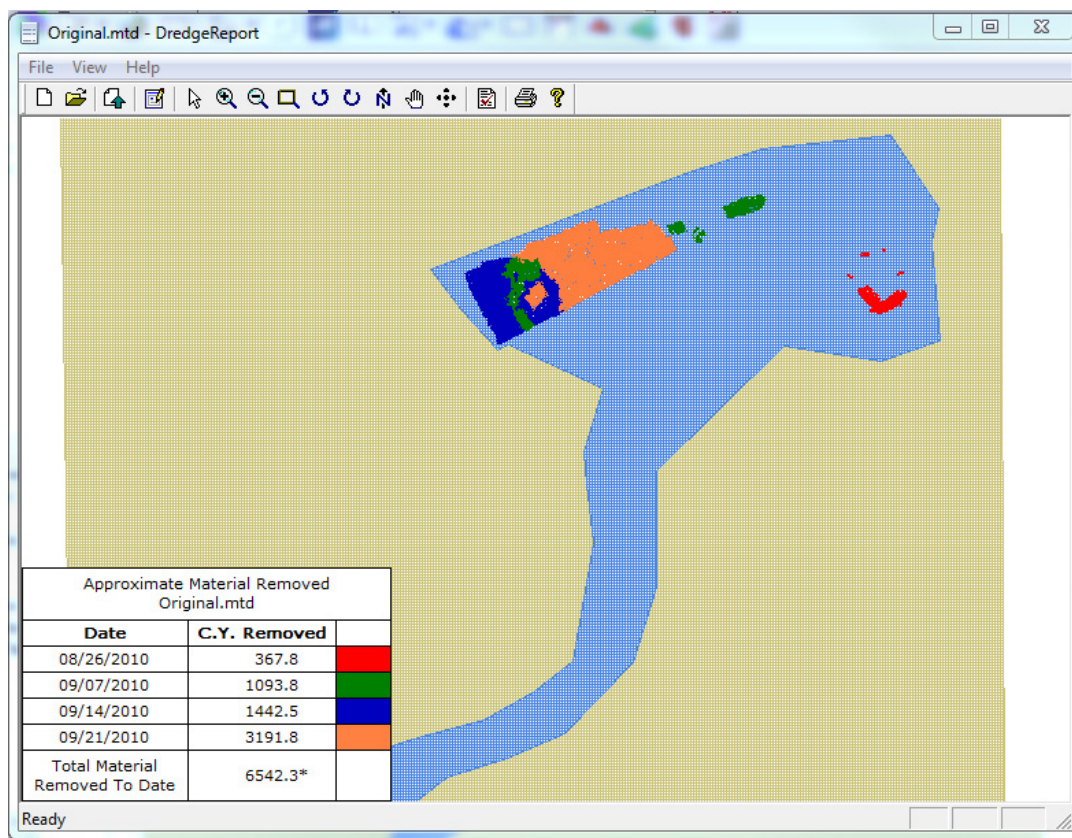
DREDGEPACK® Matrix Reporter

By Jerry Knisley

Recently we added a tool to the DREDGEPACK® arsenal to help with creating a daily report. I was on a customer's site where they shared with me a copy of a report that they created based upon our bucket files. They would outline the daily buckets with a polygon in Autocad and filled it with a hatch to show the dredge for that day. They then computed a quantity removed for that day and displayed that value in a table.

With a copy of that report, John Marinuzzi wrote a program to automate their process with one difference: instead of the bucket files we chose to use the Matrix file.

FIGURE 1. Sample Matrix Reporter



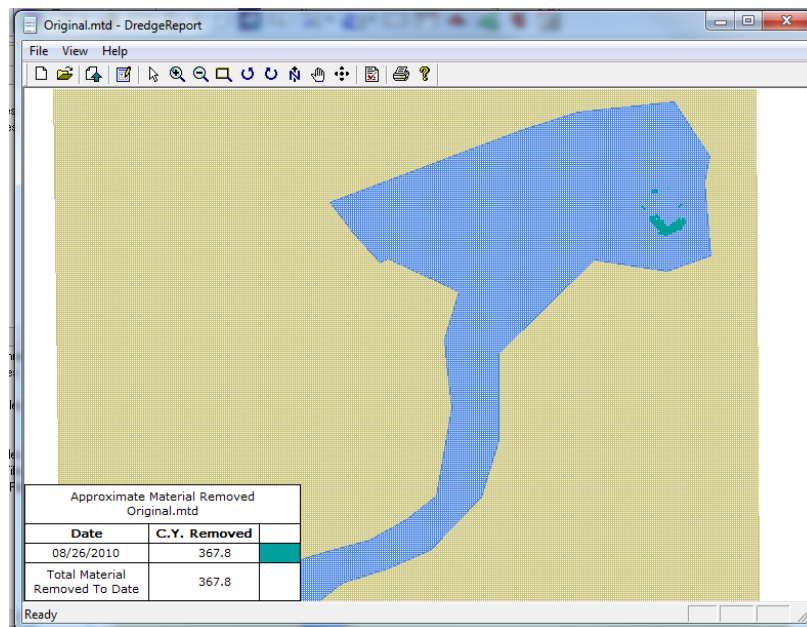
In Figure 1, the areas that were dredged over four days are highlighted in different colors—one color for each day's work. The estimated amount of material removed is displayed in the table on the bottom left.

Important!: Please do not confuse this with a volume. It is a rough estimate based upon the depth of a cutting tool as it traveled through the matrix. It is possible to lower the tool and pass it through the material with out actually removing material so this **cannot** be used as a volume.

INITIAL SETUP

At the beginning of the project, you open the pre-dredge matrix to create a base record of the project. All of the data is stored in an MTD file with the same name as the matrix. This initial loading of the matrix uses the SURVEY depth in the matrix file as the basis against which it computes all future estimates so be sure that this is an accurate survey.

FIGURE 2. Load your Pre-dredge SURVEY Matrix to the Matrix Reporter



UPDATE

Typically, you will use the same matrix to record your dredging progress. At the end of each day, you will load it to the Matrix Reporter. The program compares the dredge data in the MTX to the data in the MTD file and color-codes the areas in the display where the data has changed to show where work has been done for the day.

To load an update, select the third icon on the tool bar and select the matrix to add. The update must be from the same source matrix parameters. This means that the corner, size and cell size must all be exactly the same. The program will not remap data from a matrix that does not have the same header.

Once the update has been added to the database, the cells that have been changed will appear in the map area.

Managing Updates

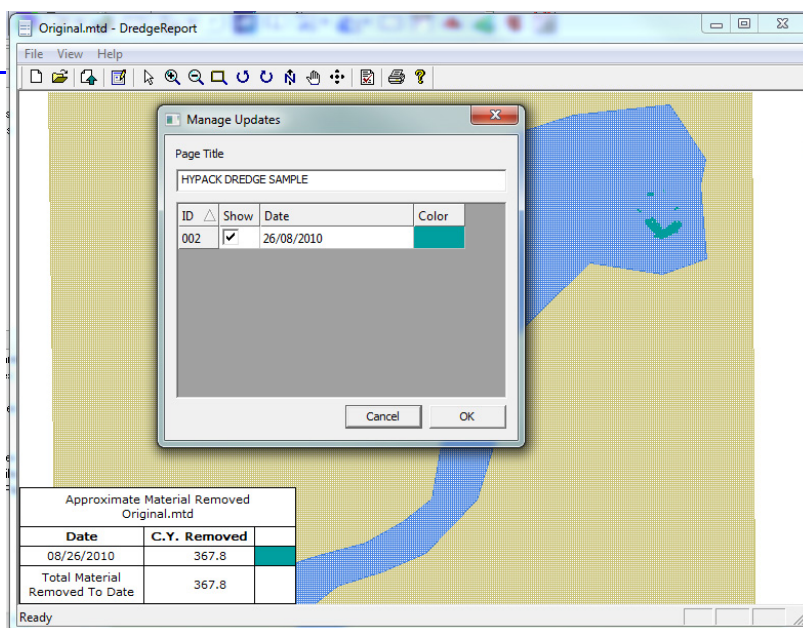
To change the color or the date you can choose the fourth icon on the tool bar.

FIGURE 3. Managing Updates

The Manage Updates dialog appears and you can:

- add a title to the page,
- change the color of any update,
- change the date of any update
- turn off any update.

When an update is turned off in the Manage Updates dialog, it will not display on the map but *the Total Material Removed Estimate will include all of the dates in the database.*



Final Output

FIGURE 4.
Sample Final Report

This is a copy of a PDF created using the program. (The blue bar at the top has been added to hide the name of the particular project.)

This utility will be included with our 2011 release.

