

Channel Portfolio Tool

Module 5: Dredging Work Package Formulator

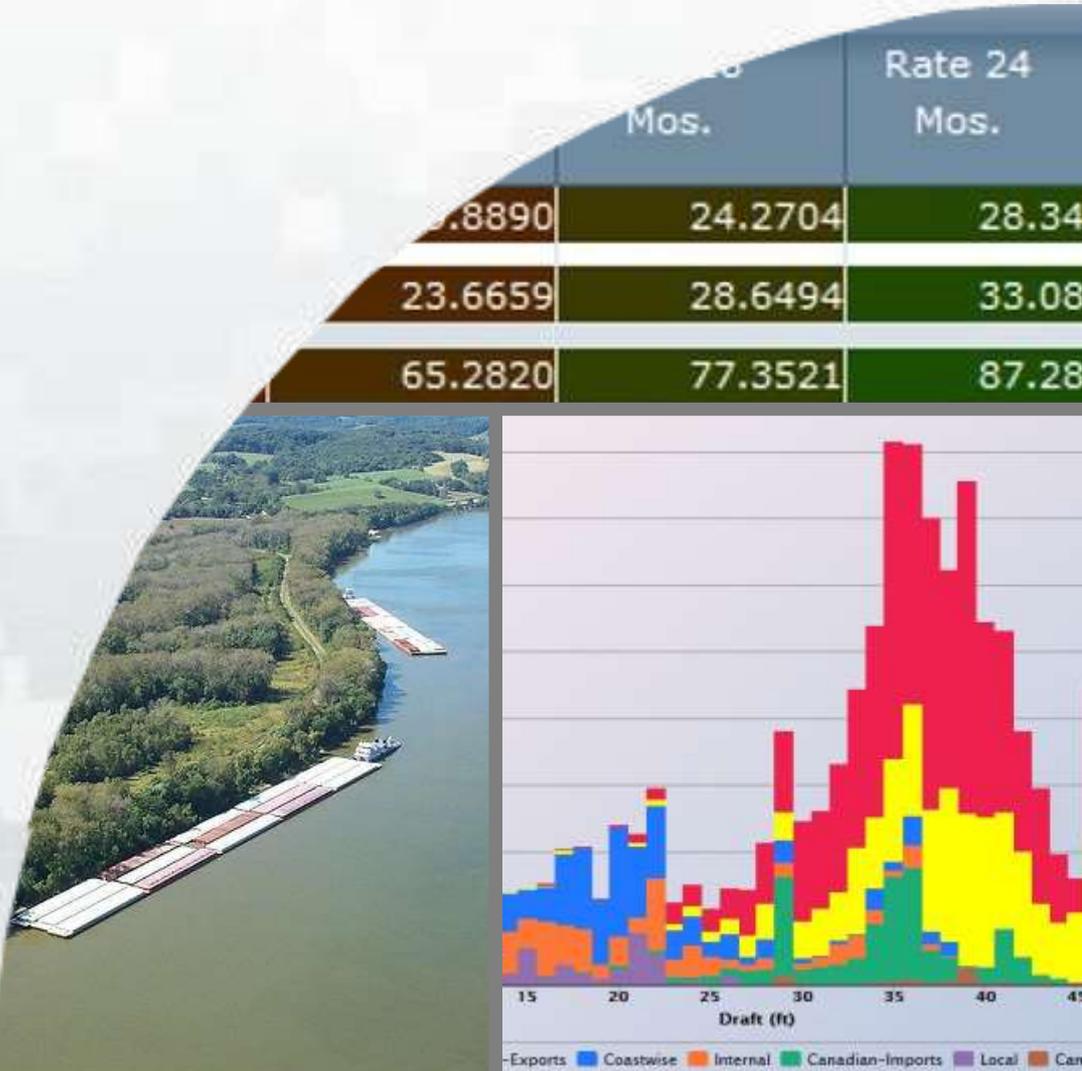


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Module outline

- What is the CPT Work Package formulator and who would use this functionality?
- Setting the 'Work Package Details' filter toggles
- How to read the color-coded work package results table
- Saving Work Packages
- Comparing Work Packages
- Including shoaling estimates (cubic yardage) in a work package
- Summary reminders

NOTE!

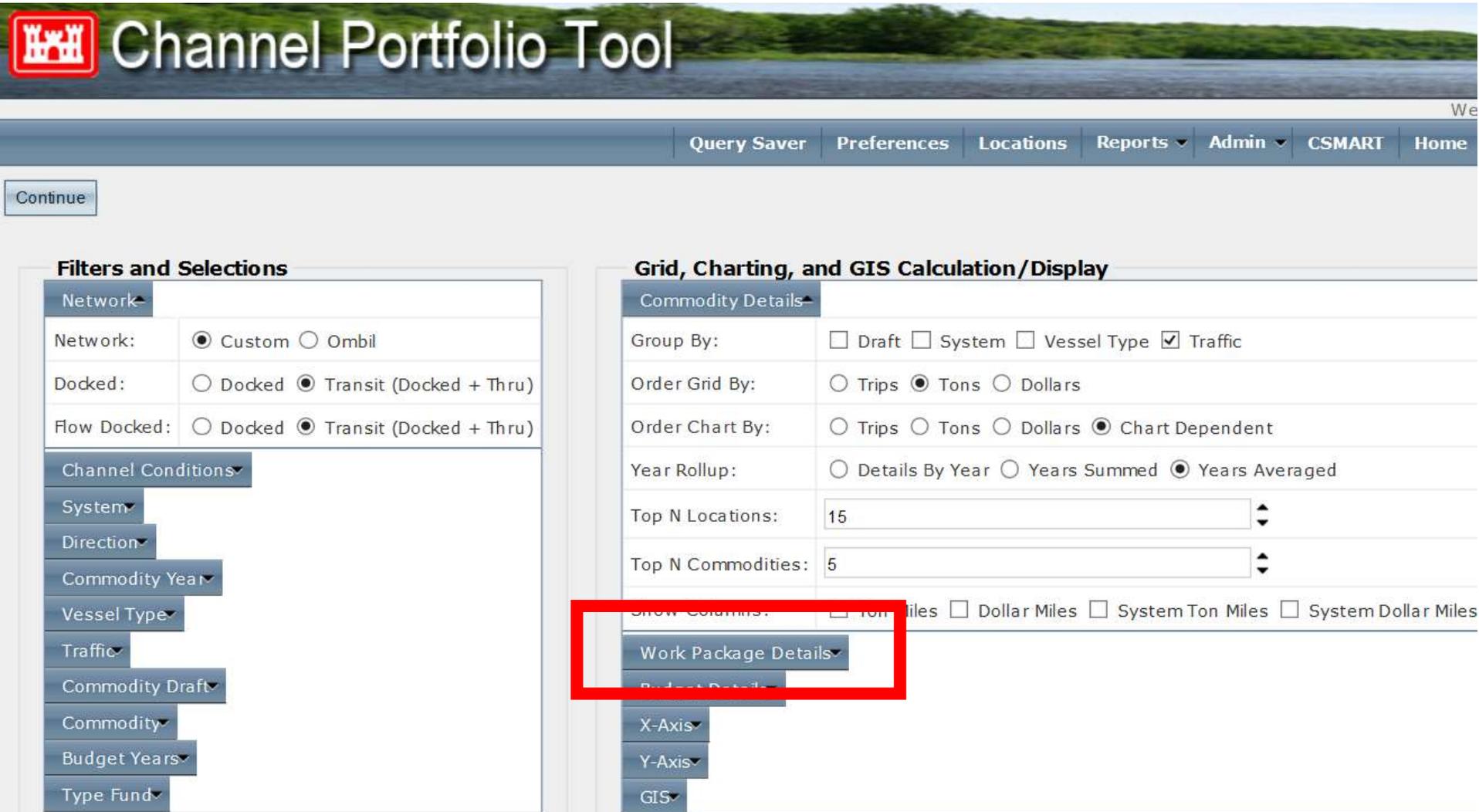
The dredging Work Package Details functionality is limited to projects that have received shoaling forecast data from the Corps' Shoaling Analysis Tool (CSAT).

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Dredging Work Package Formulator - Description

- Designed for use by navigation project managers interested in comparing the relative cost effectiveness of several potential work packages.
- Each work package is a collection of reaches and target depths.
- Users can generate individual work package files from queries and then compare them within CPT.
- The **Work Package tab** displays proxy-benefit/cost information based on dredging costs, forecasted shoaling rates (where available), and tonnage supported by individual reaches.

Work Package Details – getting started



The image shows the 'Channel Portfolio Tool' interface. At the top, there is a navigation bar with links for 'Query Saver', 'Preferences', 'Locations', 'Reports', 'Admin', 'CSMART', and 'Home'. Below this is a 'Continue' button. The main content area is divided into two columns. The left column is titled 'Filters and Selections' and contains several sections: 'Network' with radio buttons for 'Custom' (selected) and 'Ombil'; 'Docked' with radio buttons for 'Docked' and 'Transit (Docked + Thru)' (selected); 'Flow Docked' with radio buttons for 'Docked' and 'Transit (Docked + Thru)' (selected); and a list of dropdown menus including 'Channel Conditions', 'System', 'Direction', 'Commodity Year', 'Vessel Type', 'Traffic', 'Commodity Draft', 'Commodity', 'Budget Years', and 'Type Fund'. The right column is titled 'Grid, Charting, and GIS Calculation/Display' and contains a 'Commodity Details' section with various settings: 'Group By' (checkboxes for Draft, System, Vessel Type, and Traffic (checked)); 'Order Grid By' (radio buttons for Trips, Tons (selected), and Dollars); 'Order Chart By' (radio buttons for Trips, Tons, Dollars, and Chart Dependent (selected)); 'Year Rollup' (radio buttons for Details By Year, Years Summed, and Years Averaged (selected)); 'Top N Locations' (input field with value 15); 'Top N Commodities' (input field with value 5); and 'Show Columns' (checkboxes for Ton Miles, Dollar Miles, System Ton Miles, and System Dollar Miles). A red box highlights the 'Work Package Details' dropdown menu in the right column.

Channel Portfolio Tool

Query Saver Preferences Locations Reports Admin CSMART Home

Continue

Filters and Selections

Network

Network: Custom Ombil

Docked: Docked Transit (Docked + Thru)

Flow Docked: Docked Transit (Docked + Thru)

Channel Conditions

System

Direction

Commodity Year

Vessel Type

Traffic

Commodity Draft

Commodity

Budget Years

Type Fund

Grid, Charting, and GIS Calculation/Display

Commodity Details

Group By: Draft System Vessel Type Traffic

Order Grid By: Trips Tons Dollars

Order Chart By: Trips Tons Dollars Chart Dependent

Year Rollup: Details By Year Years Summed Years Averaged

Top N Locations: 15

Top N Commodities: 5

Show Columns: Ton Miles Dollar Miles System Ton Miles System Dollar Miles

Work Package Details

X-Axis

Y-Axis

GIS

Setting Work Package Details Toggles

Work Package Details	
Dredge Cost/Benefit By:	<input checked="" type="radio"/> Tons <input type="radio"/> Dollars
Show Columns:	<input type="checkbox"/> Show Cubic Yardage
Penalty:	<input checked="" type="checkbox"/> Deeper Draft
Color Scale:	<input checked="" type="radio"/> Linear <input type="radio"/> Logarithmic
Draft Mode:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Top N Draft:	<input type="text" value="0"/>
Filter Mode:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Filter Details N Draft:	<input type="text" value="5"/>
Mob\De-Mob Cost:	<input type="text" value="1,000,000"/>
Cost\yd^3:	<input type="text" value="3.00"/>

Penalty toggle

If checked, any tonnage drafting deeper than the target/authorized elevation will be removed from the final score calculation.

If you are considering dredging shallower than the authorized depth because of cost limits, then the penalty box applies, keep it checked.

Tip: most users leave the Penalty boxed checked.

Setting Work Package Details Toggles

Work Package Details	
Dredge Cost/Benefit By:	<input checked="" type="radio"/> Tons <input type="radio"/> Dollars
Show Columns:	<input type="checkbox"/> Show Cubic Yardage
Penalty:	<input checked="" type="checkbox"/> Deeper Draft
Color Scale:	<input checked="" type="radio"/> Linear <input type="radio"/> Logarithmic
Draft Mode:	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Filter Mode:	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Mob\De-Mob Cost:	<input type="text" value="1,000,000"/>
Cost\yd^3:	<input type="text" value="3.00"/>

Enable **Draft Mode** and **Filter Mode** to add specificity to query.

Work Package Details

- Dredge Cost/Benefit By: Tons Dollars
- Show Columns: Show Cubic Yardage
- Penalty: Deeper Draft
- Color Scale: Linear Logarithmic
- Draft Mode: Enable Disable

Top N Draft:

0

Enable **Draft Mode** and **Filter Mode**

Filter Mode:

Enable Disable

Two more fields will appear

Filter Details N Draft:

5

Mob\De-Mob Cost:

1,000,000

Cost\yd³:

3.00

Top N Draft = deepest N feet of channel depth in the work package

Work Package Details	
Dredge Cost/Benefit By:	<input checked="" type="radio"/> Tons <input type="radio"/> Dollars
Show Columns:	<input type="checkbox"/> Show Cubic Yardage
Penalty:	<input checked="" type="checkbox"/> Deeper Draft
Color Scale:	<input checked="" type="radio"/> Linear <input type="radio"/> Logarithmic
Draft Mode:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Top N Draft:	<input type="text" value="0"/>
Filter Mode:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Filter Details N Draft:	<input type="text" value="5"/>
Mob\De-Mob Cost:	<input type="text" value="1,000,000"/>
Cost\yd^3:	<input type="text" value="3.00"/>

If users select 10ft, the query will select **only** the deepest 10ft in each reach covered by the work package.

If you DO NOT provide a value, the query results will only display tonnage deeper than or equal to the target elevation

Tip: If there are uncertainties, e.g. greater under-keel clearance, users should be more generous in setting the Top N Draft number.

Filter Details N Draft = filters results down to *N* ft window on either side of the target elevation

Work Package Details	
Dredge Cost/Benefit By:	<input checked="" type="radio"/> Tons <input type="radio"/> Dollars
Show Columns:	<input type="checkbox"/> Show Cubic Yardage
Penalty:	<input checked="" type="checkbox"/> Deeper Draft
Color Scale:	<input checked="" type="radio"/> Linear <input type="radio"/> Logarithmic
Draft Mode:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Top N Draft:	<input type="text" value="0"/>
Filter Mode:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Filter Details N Draft:	<input type="text" value="5"/>
Mob\De-Mob Cost:	<input type="text" value="1,000,000"/>
Cost\yd^3:	<input type="text" value="3.00"/>

Setting this filter to 5 will result in the results displaying only 5 ft on either side of target elevation.

Default setting displays all the possible rows for query results.

Tip: Most users should set 'Filter Details N Draft' to 10, to focus on the most relevant results

Work Package Details

Dredge Cost/Benefit By:	<input checked="" type="radio"/> Tons <input type="radio"/> Dollars
Show Columns:	<input type="checkbox"/> Show Cubic Yardage
Penalty:	<input checked="" type="checkbox"/> Deeper Draft
Color Scale:	<input checked="" type="radio"/> Linear <input type="radio"/> Logarithmic
Draft Mode:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable

Top N Draft:

0



Filter Mode:

Enable Disable

Filter Details N Draft:

5

Mob\De-Mob Cost:

1,000,000

Cost\yd^3:

3.00

The default Mob/De-mob cost is \$1m.

The default cost per cubic yard is \$3.

These setting will apply to any reach you select.

You can change these parameters to reflect your local pricing.

Note: You can change the Mob/De-mob and Cost values later when viewing results, and then recalculate from within the results screen.

Continue

Locations

- Lakes and Rivers
- Mississippi Valley
- North Atlantic
- Northwestern
- Pacific Ocean
- South Atlantic
- South Pacific
- Southwestern

Continue

After you set filters on the **Preferences** page, click **Continue**.

Select reaches for your query from the **Locations** page.

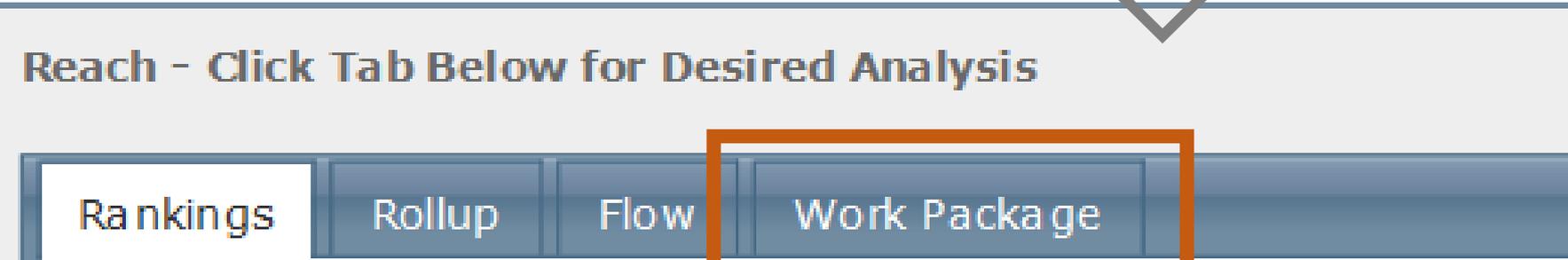
Click **Continue**.

To view the Work Package tab you must be viewing Reach level results.

Use the **Reports** menu, select Reach. Once in the Reach view, click on the Work Package tab.



The screenshot shows the top navigation bar of a software application. The 'Reports' menu is open, displaying a list of options: Division, District, Project, Reach, Work Package, and Reach Definition. The 'Reach' option is highlighted with a blue background. Below the navigation bar, there is a section titled 'Division - Click Tab Below for Desired Analysis' with three tabs: 'Rankings', 'Rollup', and 'Flow'.



The screenshot shows the 'Reach' view of the software application. It features a section titled 'Reach - Click Tab Below for Desired Analysis' with four tabs: 'Rankings', 'Rollup', 'Flow', and 'Work Package'. The 'Work Package' tab is highlighted with an orange border.



The screenshot shows the 'Order Grid By' options in the software application. It includes three radio buttons: 'Trips', 'Tons', and 'Dollars'. The 'Tons' radio button is selected. To the right of the radio buttons is an 'Update' button.

Reach Ranking - Click Reach Row in Grid for Details



The screenshot shows the export options in the software application. It includes three buttons: 'Export to Excel', 'Export to PDF', and 'Export to Google Earth'.

Work Package – final steps

Reach - Click Tab Below for Desired Analysis

Rankings Rollup Flow Work Package

Dredge Cost/Benefit By: Tons Dollars

Color Scale: Linear Logarithmic

Mob\De-Mob Cost: 1,000,000

Cost\yd^3: 3.00

Update Reach Dredging Cost

← Change the Mob/de-mob or cost/cy values by typing directly in these boxes.

Reach Work Package

	Parent Name	Name	Under Keel Buffer	Addl. Mob\De-Mob Cost	Cost Per Cubic Yard	Recommendation	
<input type="button" value="+"/> <input type="button" value="?"/>	Jacksonville Harbor	Mayport Harbor, FL (700800)	0	\$0.000	\$6.000	N/A	<input type="button" value="Edit"/>

- **Remember**, the Work Package function only works for reaches with available shoaling forecasts. **If you select reaches that do not have associated shoaling forecasts the results will display as 'N/A' in the 'Recommendation' column.**
- Users can change the Mob/de-mob or cost/cubic yard values from within the results screen. Make changes and click 'Update' button.

Viewing Work Package
Query Results

Users must be in the **Reports: Reach** view to the Work Package Tab



Reach: Work Package Tab

Reach - Click Tab Below for Desired Analysis

Rankings Rollup Flow Work Package

Dredge Cost/Benefit By: Tons Dollars

Color Scale: Linear Logarithmic

Mob\De-Mob Cost:

Cost\yd^3:

Update Reach Dredging Cost

Reach Work Package

	Parent Name	Name	Under Keel Buffer	Adl. Mob\De-Mob Cost	Cost Per Cubic Yard	Recommendation	
<input checked="" type="checkbox"/>	Jacksonville Harbor	Blount Island Channel, FL - East (701000)	0	\$0.000	\$3.000	36 Months (37 ft.) => 1,930.9758	<input type="button" value="Edit"/>
<input checked="" type="checkbox"/>	Jacksonville Harbor	Blount Island Channel, FL - East (701001)	0	\$0.000	\$3.000	N/A	<input type="button" value="Edit"/>
<input checked="" type="checkbox"/>	Jacksonville Harbor	Blount Island Channel, FL - West (701100)	0	\$0.000	\$3.000	36 Months (38 ft.) => 5,851.8800	<input type="button" value="Edit"/>

Click on the + to see results for an individual reach.

Parent Name	Name	Under Keel Buffer	Add Mob\De-Mob Cost	Cost Per Cubic Yard	Recommendation
Jacksonville Harbor	Blount Island Channel, FL - East (701000)	0	\$0.000	\$3.000	36 Months (37 ft.) => 1,930.9758

Edit

Selected	Target Elevation ft. (MLLW)	Delta Tons (x1k)	Delta Dollars (x1k)	Delta Trips	Rate Now	Rate 6 Mos.	Rate 12 Mos.	Rate 18 Mos.	Rate 24 Mos.	Rate 30 Mos.	Rate 36 Mos.
<input type="checkbox"/>	60	3,848.438	\$1,628,...	467.000	211.6804	317.4587	423.1957	528.8915	634.5461	740.1307	845.6989
<input type="checkbox"/>	59	3,848.438	\$1,628,...	467.000	217.2132	325.7546	434.2525	542.7071	651.1183	759.4861	867.8106
<input type="checkbox"/>	58	3,848.438	\$1,628,...	467.000	223.0521	334.4957	445.9026	557.2638	668.5792	779.8490	891.0730
<input type="checkbox"/>	57	3,848.438	\$1,628,...	467.000	229.2039	343.7333	458.2144	572.6229	687.0025	801.3338	915.6169
<input type="checkbox"/>	56	3,848.438	\$1,628,...	467.000	235.7048	353.4804	471.2048	588.8782	706.5005	824.0361	941.5512
<input type="checkbox"/>	55	3,848.438	\$1,628,...	467.000	242.585					1000	969.0408
<input type="checkbox"/>	54	3,848.438	\$1,628,...	467.000	249.890					5714	998.1378
<input type="checkbox"/>	53	3,848.438	\$1,628,...	467.000	257.637					6203	1,029.0364
<input type="checkbox"/>	52	3,848.438	\$1,628,...	467.000	265.880					3977	1,061.9090
<input type="checkbox"/>	51	3,848.438	\$1,628,...	467.000	274.668					1234	1,097.0066
<input type="checkbox"/>	50	3,848.438	\$1,628,...	467.000	284.0713	425.9955	567.8157	709.5840	851.2782	992.8983	1,134.4443
<input type="checkbox"/>	49	3,848.438	\$1,628,...	467.000	294.1253	441.0684	587.9319	734.7158	881.3726	1,027.9898	1,174.5276
<input type="checkbox"/>	48	3,848.438	\$1,628,...	467.000	304.9170	457.2470	609.4915	761.6505	913.7241	1,065.7124	1,217.5471
<input type="checkbox"/>	47	3,848.438	\$1,628,...	467.000	316.5308	474.6577	632.6925	790.6352	948.4858	1,106.2446	1,263.9114

Note that this large table is the result of using the default settings. All target elevation depths are shown.

.....

<input type="checkbox"/>	22	-	\$-	229.000	-	-	-	-	-	-	-
<input type="checkbox"/>	21	-	\$-	223.000	1,228.5069	1,842.1063	2,455.2635	3,067.9823	3,680.2531	4,292.0713	4,903.4459
<input type="checkbox"/>	20	-	\$-	213.000	1,319.1421	1,978.3583	2,637.3380	3,296.0814	3,954.5774	4,612.8336	5,270.8351
<input type="checkbox"/>		-	\$-		1,419.2240	2,128.5892	2,837.7900	3,546.8368	4,255.7110	4,964.4210	5,672.9667

Table shows proxy-benefit/cost ratios, based on target elevation, cost, and shoaling forecast.

The results for an individual reach in the **Recommendation** column reflect the highest score.

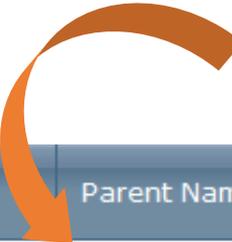
Parent Name	Name	Under Keel Buffer	Addl. Mob\De-Mob Cost	Cost Per Cubic Yard	Recommendation
Jacksonville Harbor	Blount Island Channel, FL - East (701000)	0	\$0.000	\$3.000	36 Months (37 ft.) => 1,930.9758

Selected	Target Elevation ft. (MLLW)	Delta Tons (x1k)	Delta Dollars (x1k)	Delta Trips	Rate Now	Rate 6 Mos.	Rate 12 Mos.	Rate 18 Mos.	Rate 24 Mos.	Rate 30 Mos.	Rate 36 Mos.
<input type="checkbox"/>	60	3,848.438	\$1,628,...	467.000	211.6804	317.4587	423.1957	528.8915	634.5461	740.1307	845.6989
<input type="checkbox"/>	59	3,848.438	\$1,628,...	467.000	217.2132	325.7546	434.2525	542.7071	651.1183	759.4861	867.8106
<input type="checkbox"/>	58	3,848.438	\$1,628,...	467.000	223.0521	334.4957	445.9026	557.2638	668.5792	779.8490	891.0730
<input type="checkbox"/>	57	3,848.438	\$1,628,...	467.000	229.2039	343.7333	458.2144	572.6229	687.0025	801.3338	915.6169
.....											
<input type="checkbox"/>	39	3,848.438	\$1,628,...	467.000	454.8017	681.9168	908.8341	1,135.5577	1,362.0992	1,588.4379	1,814.5837
<input type="checkbox"/>	38	3,848.438	\$1,628,...	467.000	480.6083	720.5998	960.3747	1,199.9480	1,439.3011	1,678.4575	1,917.3900
<input checked="" type="checkbox"/>	37	3,757.644	\$1,550,...	463.000	484.0234	725.7157	967.1954	1,208.4514	1,449.5045	1,690.3451	1,930.9758
<input type="checkbox"/>	36	3,481.036	\$1,392,...	455.000	460.2698	690.0899	919.7006	1,149.1020	1,378.2945	1,607.2784	1,836.0539
<input type="checkbox"/>	35	1,515.086	\$1,185,...	423.000	415.5699	623.0600	830.3627	1,037.4629	1,244.3805	1,451.0918	1,657.6255

Scores in the RATE columns reflects the tons supported per dredging dollar invested. These values are the proxy-benefit/cost ratio scores based on the parameters used in the query.

Selecting desired depths
for reaches

For each reach in your work package you must select a target elevation. CPT will automatically select the most favorable target elevation for each reach, as shown in the **Recommendation** column for that reach.



Parent Name	Name	Under Keel Buffer	Addl. Mob\De-Mob Cost	Cost Per Cubic Yard	Recommendation
Jacksonville Harbor	Blount Island Channel, FL - East (701000)	0	\$0.000	\$3.000	36 Months (37 ft.) => 1,930.9758

Selected	Target Elevation ft. (MLLW)	Delta Tons (x1k)	Delta Dollars (x1k)	Delta Trips	Rate Now	Rate 6 Mos.	Rate 12 Mos.	Rate 18 Mos.	Rate 24 Mos.	Rate 30 Mos.	Rate 36 Mos.
<input type="checkbox"/>	60	3,848.438	\$1,628,...	467.000	211.6804	317.4587	423.1957	528.8915	634.5461	740.1307	845.6989
<input type="checkbox"/>	59	3,848.438	\$1,628,...	467.000	217.2132	325.7546	434.2525	542.7071	651.1183	759.4861	867.8106
<input type="checkbox"/>	58	3,848.438	\$1,628,...	467.000	223.0521	334.4957	445.9026	557.2638	668.5792	779.8490	891.0730
<input type="checkbox"/>	57	3,848.438	\$1,628,...	467.000	229.2039	343.7333	458.2144	572.6229	687.0025	801.3338	915.6169
.....											
<input type="checkbox"/>	39	3,848.438	\$1,628,...	467.000	454.8017	681.9168	908.8341	1,135.5577	1,362.0992	1,588.4379	1,814.5837
<input type="checkbox"/>	38	3,848.438	\$1,628,...	467.000	480.6083	720.5998	960.3747	1,199.9480	1,439.3011	1,678.4576	1,917.3900
<input checked="" type="checkbox"/>	37	3,757.644	\$1,550,...	463.000	484.0234	725.7157	967.1954	1,208.4514	1,449.5045	1,690.3459	1,930.9758
<input type="checkbox"/>	36	3,481.036	\$1,392,...	455.000	460.2698	690.0899	919.7006	1,149.1020	1,378.2945	1,607.2784	1,836.0539
<input type="checkbox"/>	35	1,515.086	\$1,185,...	423.000	415.5699	623.0600	830.3627	1,037.4629	1,244.3805	1,451.0918	1,657.6255

This image shows a selection for 37 ft Target Elevation. In this case 37ft was recommended by CPT for this reach under the specific query settings (mob/de-mob costs, cost/cy, etc).

After selecting target elevations for each reach in your group, click Rollup

Reach - Click Tab Below for Desired Analysis

Rankings | **Rollup** | Flow | Work Package

Dredge Cost/Benefit By: Tons Dollars

Color Scale: Linear Logarithmic

Mob\De-Mob Cost: 1,000,000

Cost\yd^3: 3.00

Update Reach Dredging Cost

Reach Work Package

	Parent Name	Name	Under Keel Buffer	Addl. Mob\De-Mob Cost	Cost Per Cubic Yard	Recommendation	
+	Jacksonville Harbor	Blount Island Channel, FL - East (701000)	0	\$0.000	\$3.000	36 Months (37 ft.) => 1,930.9758	<input type="button" value="Edit"/>
+	Jacksonville Harbor	Blount Island Channel, FL - East (701001)	0	\$0.000	\$3.000	N/A	<input type="button" value="Edit"/>
+	Jacksonville Harbor	Blount Island Channel, FL - West (701100)	0	\$0.000	\$3.000	36 Months (38 ft.) => 5,851.8800	<input type="button" value="Edit"/>

CPT will generate a new table named **Reach Work Package Rollup** at the bottom of your screen

The same color-scale output is used, the bright green cell has the highest proxy-BCR for the selected combination of reaches and target elevations.

Note: **Rollup proxy-BCRs** are **much** lower than individual reach proxy-BCRs, this is a reflection of the increased dredging requirements to support the same amount of tonnage (i.e., a larger denominator with the same numerator)

Reach Work Package Rollup

Save Work Package

	Mob Demob Cost	Cost Per Cubic Yard	Top N Delta Tons (x1k)	Top N Delta Dollars (x1k)	Rate	Rate 6	Rate 12	Rate 18	Rate 24	Rate 30	Rate 36
+	\$1,000,00...	\$3.000	17,075.235	\$34,743,3...	12.3878	18.1583	23.5573	28.5023	32.8994	36.5963	39.5608

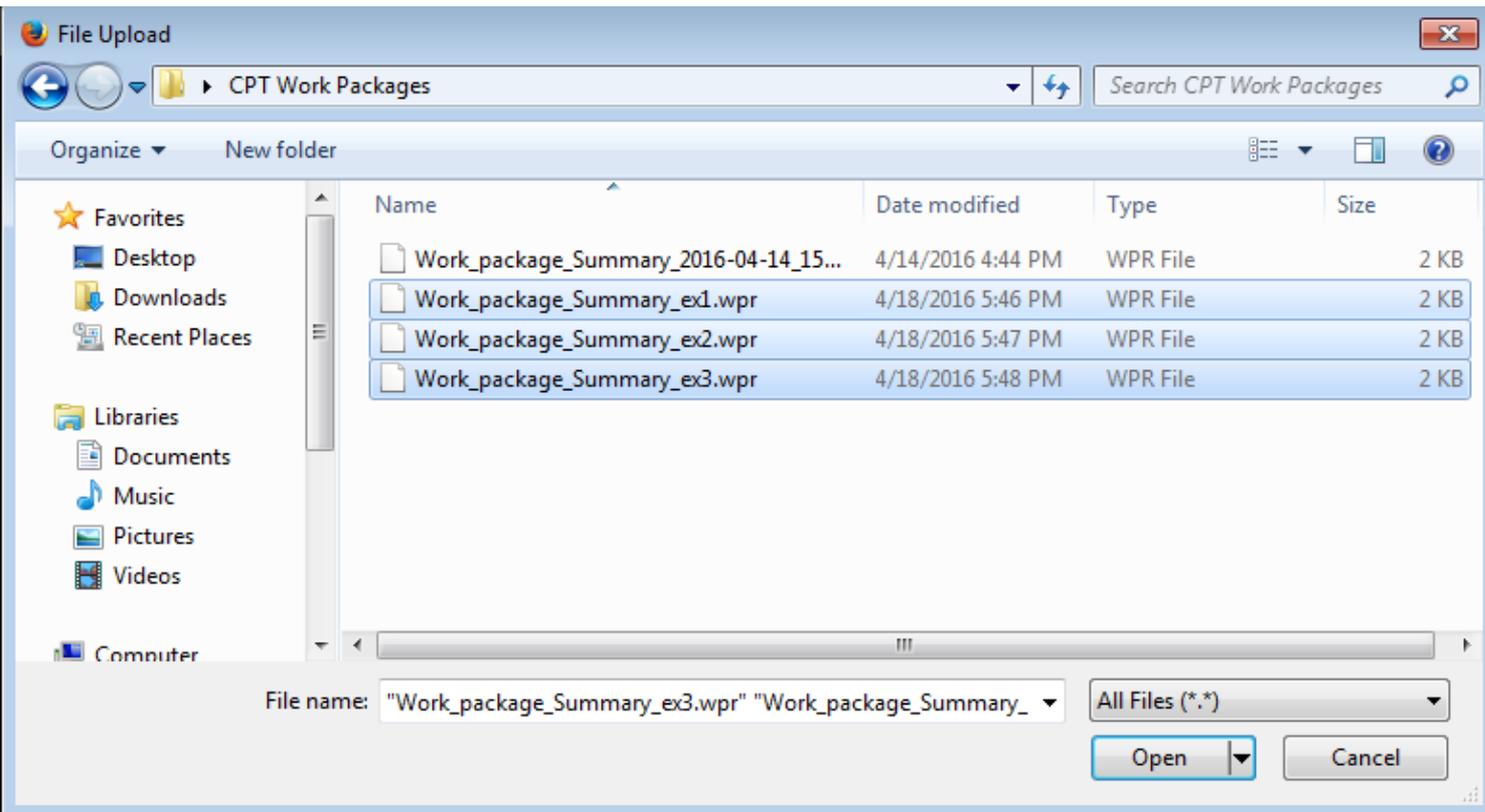
Save Work Package

Click on Save Work Package button to save your file (.wpr). Customize the name with important specifics to help your future self remember what you did. You will need to access this file later to compare different work packages.

Comparing Work Packages



Select **Reports: Work Package** from the Reports drop-down menu at the top of the page.



Then select all of the work packages to be compared.

Select file(s) to Upload Saved Work Package.

Select...

- Work_package_Summary_ex...
- Work_package_Summary_ex...
- Work_package_Summary_ex...

Compare Work Packages

Selected work packages will appear in the list. Click on the Upload files button to load the .wpr files into CPT.

Files that have been successfully uploaded will display a green circle to the left of the filename.

Click on Compare Work Packages to generate the side-by-side comparison of the selected work packages.

Select file(s) to Upload Saved Work Package.

Select...

- Work_package_Summary_ex...
- Work_package_Summary_ex...
- Work_package_Summary_ex...

Compare Work Packages

Note: Color-coding only applies *within* a work package, not across the compared packages.

Work Package Rollup Comparison

		Mob Demob Cost	Cost Per Cubic Yard	Delta Tons (x1k)	Delta Dollars (x1k)	Rate Now	Rate 6 Mos.	Rate 12 Mos.	Rate 18 Mos.	Rate 24 Mos.	Rate 30 Mos.	Rate 36 Mos.
<input type="checkbox"/>	<input type="button" value="?"/>	\$800,000....	\$5.000	13,155.605	\$32,086,6...	10.3431	15.2353	19.8890	24.2704	28.3431	32.0558	35.3429
<input type="checkbox"/>	<input type="button" value="?"/>	\$1,000,00...	\$3.000	16,954.989	\$34,714,6...	12.4299	18.2312	23.6659	28.6494	33.0848	36.8157	39.8077
<input type="checkbox"/>	<input type="button" value="?"/>	\$100,000....	\$7.000	9,027.459	\$29,287,3...	35.4786	51.2470	65.2820	77.3521	87.2896	94.9106	100.0558



Including shoaling
estimates in a work
package

Work Package Details	
Dredge Cost/Benefit By:	<input checked="" type="radio"/> Tons <input type="radio"/> Dollars
Show Columns:	<input checked="" type="checkbox"/> Show Cubic Yardage

On the **Preferences** page, when setting the initial **Work Package Details** filter, users can select Show Cubic Yardage.

This option allows users to see how the CSAT shoaling estimates included in their work package calculations change over time.

Results include the CY shoaling estimates

Selected	Target Elevation ft. (MLLW)	CY Now	CY 6 Mos.	CY 12 Mos.	CY 18 Mos.	CY 24 Mos.	CY 30 Mos.	CY 36 Mos.
<input type="checkbox"/>	60	3664000	3834700	4006300	4178600	4351300	4524600	4698500
<input type="checkbox"/>	59	3148100	3310800	3477400	3646700	3817300	3988800	4161000
<input type="checkbox"/>	58	2672000	2821700	2974900	3131800	3294000	3460300	3629300
<input type="checkbox"/>	57	2230200	2368500	2510900	2656900	2806300	2959100	3115600
<input type="checkbox"/>	56	1827800	1954300	2083100	2216300	2354300	2496200	2641900
<input type="checkbox"/>	55	1451500	1569800	1691200	1815100	1941300	2069800	2202500
<input type="checkbox"/>	54	1103800	1213000	1324800	1439600	1557600	1678700	1802400
<input type="checkbox"/>	53	783310	883580	986730	1092800	1201700	1313300	1427800
<input type="checkbox"/>	52	499780	585640	676910	773280	873240	976090	1081900
<input type="checkbox"/>	51	270690	338540	412380	491370	576650	667380	763280
<input type="checkbox"/>	50	115840	155030	204870	264190	331310	404650	483040
<input type="checkbox"/>	49	44996	61342	83154	112420	150550	199380	257770
<input type="checkbox"/>	48	16130	22712	31632	43576	59464	80606	109090
<input type="checkbox"/>	47	5263	7658	10973	15571	21943	30600	42195
<input type="checkbox"/>	46	1408	2203	3385	5062	7376	10585	15030
<input type="checkbox"/>	45	327	531	844	1345	2106	3243	4867
<input type="checkbox"/>	44	26	73	163	310	507	804	1284
<input type="checkbox"/>	43	0	1	6	23	67	151	293
<input type="checkbox"/>	42	0	0	0	0	1	5	20
<input checked="" type="checkbox"/>	41	0	0	0	0	0	0	0
<input type="checkbox"/>	40	0	0	0	0	0	0	0

Top N Delta Tons (x1k)	Top N Delta Dollars (x1k)	Top N Delta Trips	Rate Now	Rate 6 Mos.
16,957....	\$34,71...	4,848.0...	1.4140	2.0342
16,957....	\$34,71...	4,848.0...	1.6236	2.3266
16,957....	\$34,71...	4,848.0...	1.8808	2.6873
16,957....	\$34,71...	4,848.0...	2.2049	3.1381
16,957....	\$34,71...	4,848.0...	2.6155	3.7063
16,957....	\$34,71...	4,848.0...	3.1669	4.4551
16,957....	\$34,71...	4,848.0...	3.9331	5.4830
16,957....	\$34,71...	4,848.0...	5.0619	6.9673
16,957....	\$34,71...	4,848.0...	6.7847	9.2261
16,957....	\$34,71...	4,848.0...	9.3579	12.6193
16,957....	\$34,71...	4,848.0...	12.5840	17.3612
16,957....	\$34,71...	4,848.0...	14.9404	21.4824
16,957....	\$34,71...	4,848.0...	16.1745	23.8132
16,957....	\$34,71...	4,848.0...	16.6936	24.8645
16,957....	\$34,71...	4,848.0...	16.8858	25.2687
16,957....	\$34,71...	4,848.0...	16.9405	25.3953
16,957....	\$34,71...	4,848.0...	16.9558	25.4302
16,957....	\$34,71...	4,848.0...	16.9572	25.4357
16,957....	\$34,71...	4,848.0...	16.9572	25.4357
16,957....	\$34,71...	4,848.0...	16.9572	25.4357
16,957....	\$34,71...	4,848.0...	16.9572	25.4357

Summary Reminders

- The Work Package Rollup Comparison **does not include reach listings**. Users are advised to keep a list of specific reaches included in each work package in an easily retrievable location or to embed this information within the .wpr file name.
- Work Package functionality is limited to projects that have received shoaling forecast data from the Corps' Shoaling Analysis Tool (CSAT). If results display 'N/A' then no shoaling forecasts are available.
- The dredging work package function is intended for use by navigation project managers interested in comparing the relative cost effectiveness of several potential work packages, as calculated by CPT.

End of module.

Please proceed to the exercise.

Questions?

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