Exercise 2. Running a query and exploring FLOW results

1. Log in to CPT at https://cpt.usace.army.mil/
2. You will land on the **Preferences** page.
3. Under the **Filters and Selections** panel you will see multiple filter options.
4. For this example, in the **Network** filter section, leave the defaults as:
   Network = Custom
   Docked = Transit
   Flow Docked = Transit

   By selecting the 'Transit' options, the future flow results will show all reaches that tonnage transited through, not just the reaches where tonnage docked.
5. Click on **Commodity Year** to open the filter, select 2016.
6. Click on the **Continue** button.
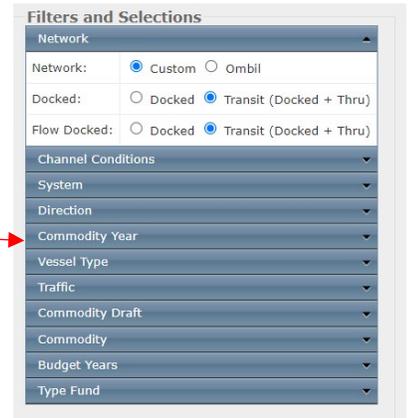
7. On the **Locations** page, expand the **Mississippi Valley** Division menu by clicking the **+** icon.
8. Expand the **New Orleans** District menu by clicking the **+** icon.

9. Expand the **Calcasieu River and Pass** project menu by clicking the **+** icon.

10. Select the first reach listed in the project, named **Calcasieu River, LA (Mile -01.2 to Mile 00.3) – 40ft Gap (242400).**
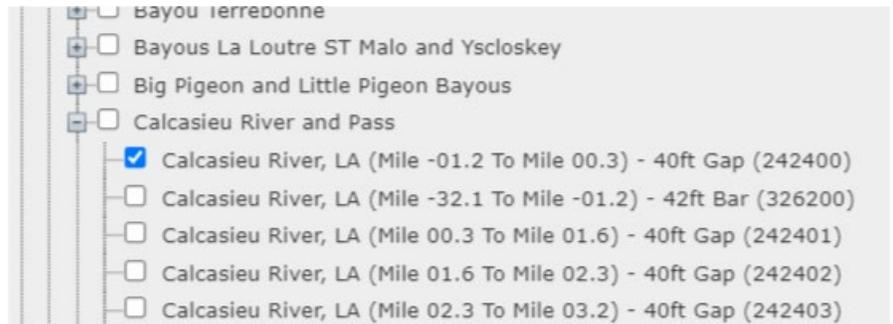
11. Click the **Continue** button.

12. On the Reach Results page, click on the **Flow** tab. →

13. The reach-level results of the flow query will display a table with all reaches and the associated tonnage, example below.

Group	Name	Tons (x1k)	Dollars (x1k)	Trips
Calcasieu River and Pass	Calcasieu River, LA (Mile -01.2 To Mile 00.3) - 40ft Gap (242400)	35,197.265	$10,265,742.345	12,719.000
Calcasieu River and Pass	Calcasieu River, LA (Mile -32.1 To Mile -01.2) - 42ft Bar (326200)	34,929.448	$8,790,330.357	2,500.000
Calcasieu River and Pass	Calcasieu River, LA (Mile 00.3 To Mile 01.6) - 40ft Gap (242401)	34,927.012	$8,835,346.226	2,016.000
Calcasieu River and Pass	Calcasieu River, LA (Mile	34,927.012	$8,835,346.226	2,016.000

Export to Excel | Export to PDF | Export to Google Earth

1 2 3 4 5 6 7 8 9 10 ... 10 ▼ Page 1 of 76 ▶ ▶| Displaying items 1 - 10 of 759

14. This table has 759 rows, indicating that there are extensive number of reaches that share tonnage with the one reach we selected for this query.
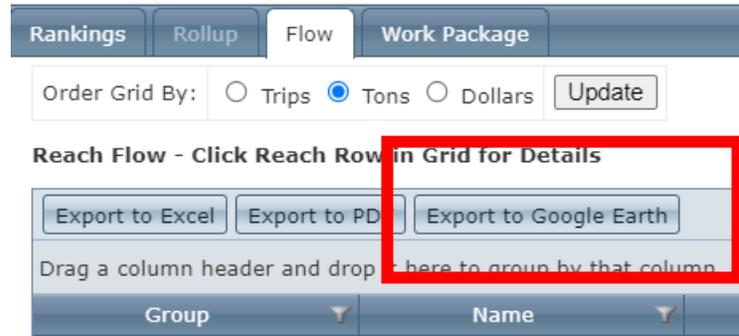
15. Click on the **Export to Google Earth** button to generate a map showing the location and amount of tonnage. →

16. You will be prompted to open or save the 2MB download.

17. Open the file in Google Earth, zoom in to the Calcasieu area, you should see a color-coded reach-level map similar to the image below. Lines that are thicker and darker red indicate more tonnage.

18. Click on any of the reaches to see the associated flow query results – a pop-up window will appear showing shared tonnage between the Calcasieu entrance reach and the reach you click. *Remember, these results are based on routing along the shortest network path between the origin and destination or reported shipments, subject to draft constraints.*

West GIWW (Mile 166.7 To Mile 202.5) (241700)

Group:	GIWW - MVN
Name:	West GIWW (Mile 166.7 To Mile 202.5) (241700)
Tons (x1k):	5.478
Dollars (x1k):	$37,577.713
Trips:	95.000
Tons Miles (x1k):	196.546
Dollar Miles (x1k):	$1,348,263.383
System Tons Miles (x1k):	1,420.090
System Dollar Miles (x1k):	$9,741,465.619

19. The color-coding and line thickness scaling can be adjusted on the **Preferences** page, under the **GIS** filter.

20. The map above showed both 'transit' reaches and 'docked' reaches. Now you'll make a map that only shows the docked reaches.

21. Return to the **Preferences** page, under the **Network** filter set the radio buttons to:
    Docked = Docked
    Flow Docked = Docked. →

Filters and Selections

Network

Network:	⦿ Custom ◯ Ombil
Docked:	⦿ Docked ◯ Transit (Docked + Thru)
Flow Docked:	⦿ Docked ◯ Transit (Docked + Thru)

22. Your other filters on the **Preferences** page should be the same. Click **Continue**.
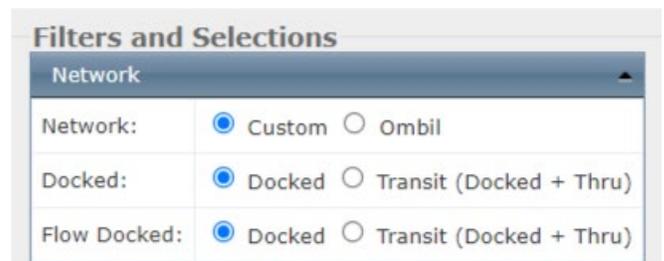
23. On the **Locations** page *we want to select a reach that has associated docks so that the query can identify origin-destination pairs for docked tonnage*, select the box next to the reach **Calcasieu River , LA (Mile 22.5 to Mile 31.8) - 40ft Upper**. If you run a flow query for a reach that does not contain any docks there will be very few results because there are no, or very few, shipments that start or stop there in the record.
24. Click **Continue**.
25. On the Reach results page, click on the **Flow** tab.
26. The **Reach Flow** table has 207 rows of data this time since it is only showing the docked reaches, not the associated through-transit reaches.

Group	Name	Tons (x1k)	Dollars (x1k)	Trips
Calcasieu River and Pass	Calcasieu River, LA (Mile 22.5 To Mile 31.8) - 40ft Upper (256000)	43,318.034	$11,999,688.474	15,039.000
Houston Ship Channel	Houston Ship Channel, TX (Mile 43.7 To Mile 46.2) - 008 Hunting Bayou to Clinton Island (243003)	2,390.210	$753,115.902	1,484.000
Houston Ship Channel	Houston Ship Channel, TX (Mile 35.9 To Mile 41.4) - 006 Carpenters Bayou to Greens Bayou (239901)	2,029.675	$667,793.357	1,455.000
Port Everglades Harbor	PORT EVERGLADES HARBOR, FL	1,002.840	$666,168.545	98.000

Export to Excel   Export to PDF   Export to Google Earth

⟲ |◄ ◄ [1] 2 3 4 5 6 7 8 9 10 … 10 ▼ Page 1 of 21 ► ►| Displaying items 1 - 10 of 207

27. Click on **Export to Google Earth**, download the file, and then open the KMZ file in Google Earth. The map will look significantly different this time!
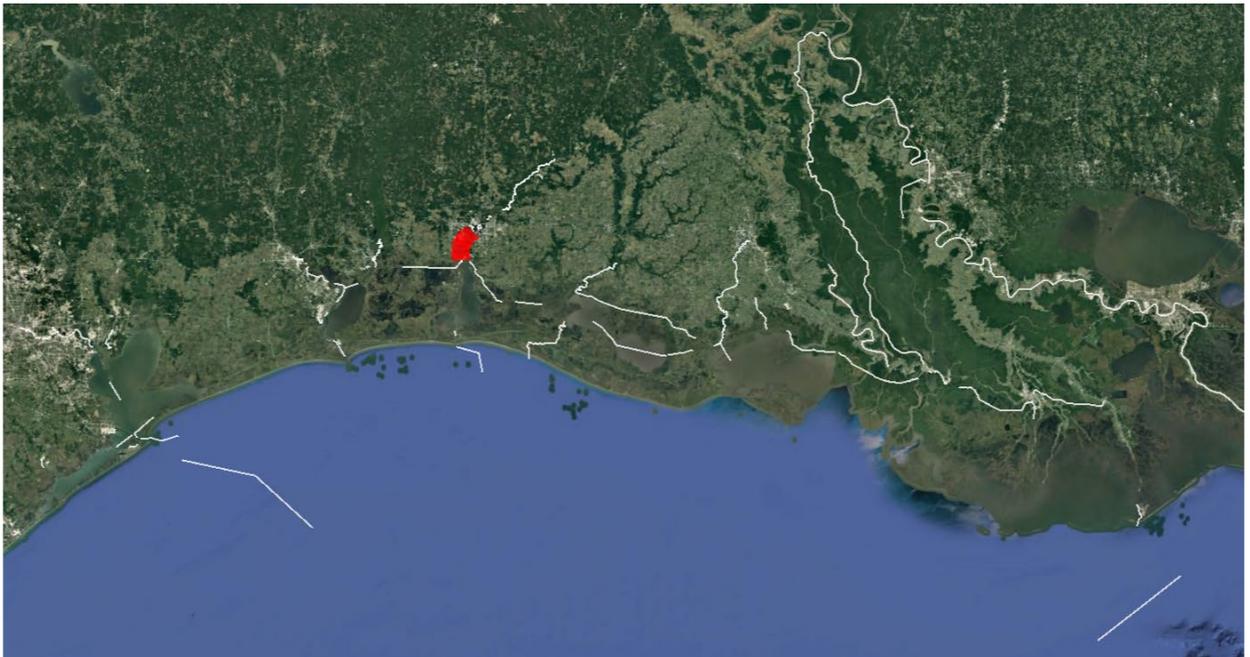
28. In a Flow map that only shows DOCKED tonnage, there will be a series of disconnected white lines. However, you can still click on those white lines to view a popup window with information about the shared tonnage.

29. In this case, the reach of the Lower Mississippi River (Mile 141.6 to 175.3) is recorded as sharing over 397,000 tons with the Calcasieu reach from the query.

End of Exercise.