

# South Atlantic Division Approach to Channel Availability

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# Ideally...

- Adequate funding to fully maintain 1000+ coastal navigation projects
- Navigation structures operating at full performance level
- Trade off criteria would not need to be developed to

## Reality...

- Constrained funding, requires Corps to develop metrics to maximize the efficiency of the Marine Transportation System (MTS) nationwide:
  - 300+ navigation projects regularly maintained
  - Channel depth-utilization considerations
  - Dredging cost tradeoff decisions
- Corps' Asset Management and other initiatives are tackling these issues.



# Metrics

- Traditional –first order screening
  - Tonnage – Water Bourne Commerce
  - Cargo Value - Customs
- SAD Secondary Screening Criteria (availability is function of utilization – if not being used \$ could go where needed)
  - Channel Utilization - CPT
  - Tonnage Disrupted - CPT
  - Cargo Value Disrupted -CPT

# Channel Availability

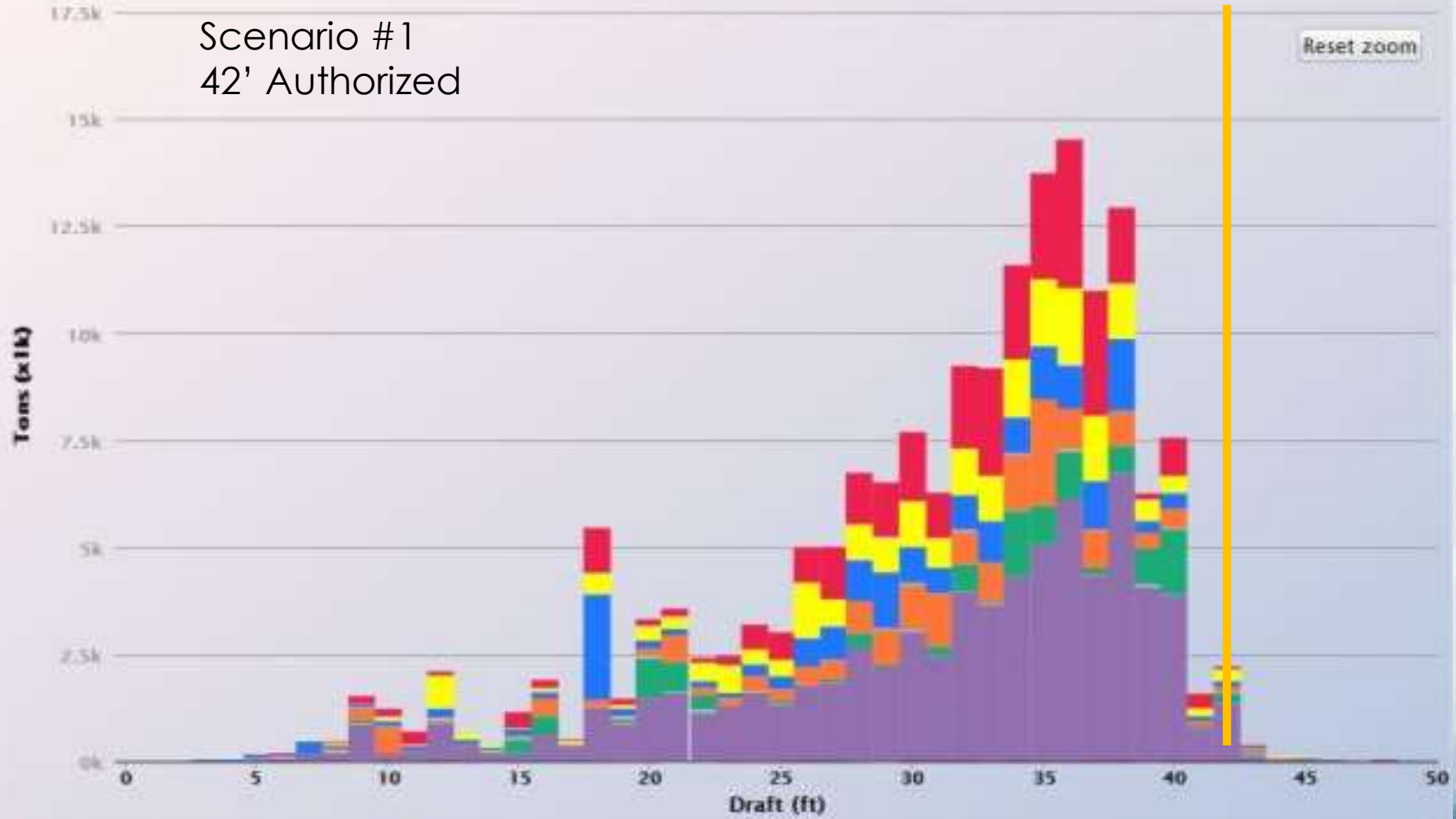
- Availability is function of utilization
- Availability alone doesn't give impacts
  - Predicted impacts = risk



# Rollup Reach Commodity Draft vs. Average Yearly Tons for AllShipments

Scenario #1  
42' Authorized

Reset zoom

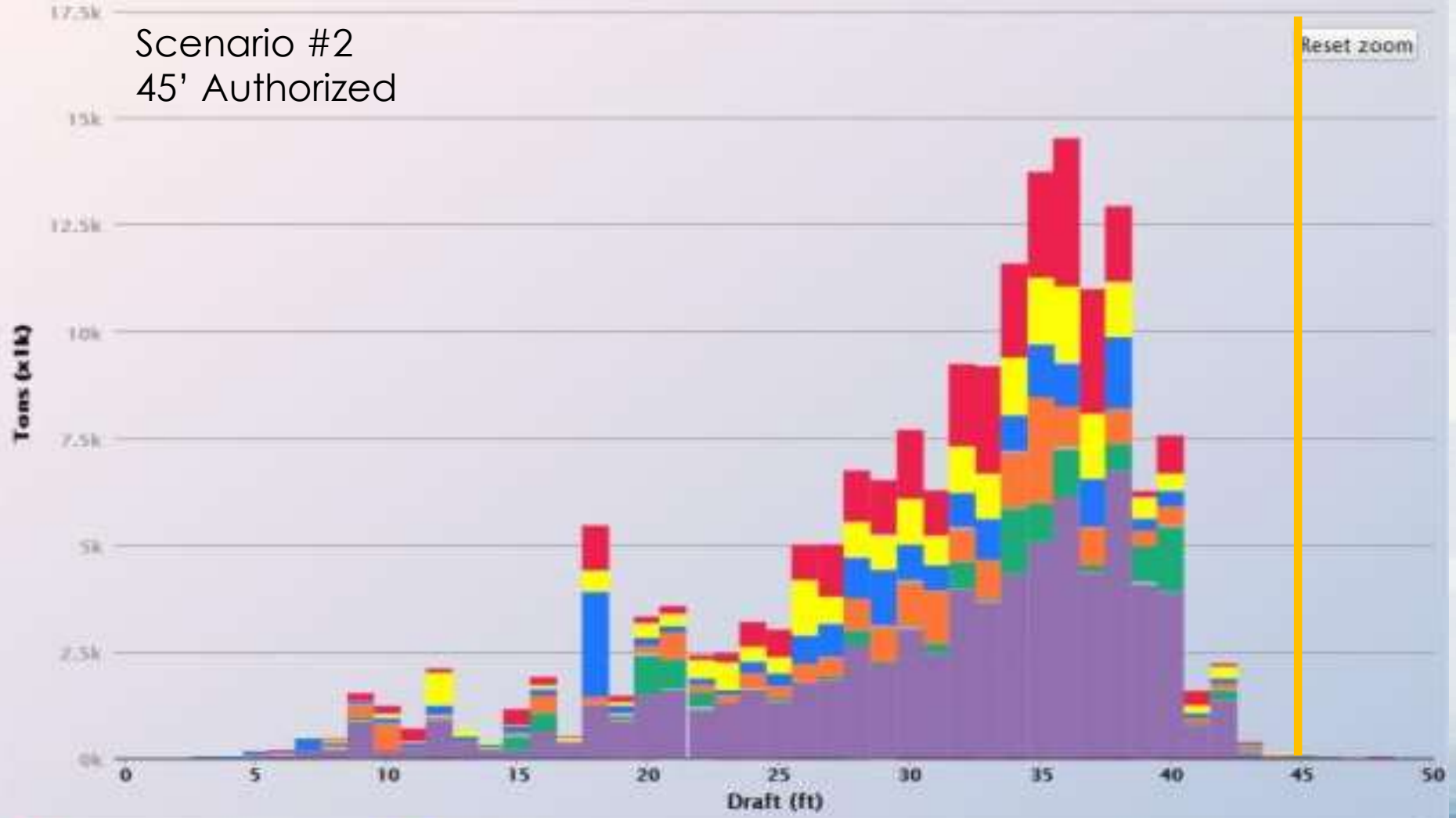


- Gasoline, Jet Fuel, Kerosene (22)
- All Manufactured Equipment, Machinery and Products (70)
- Distillate, Residual & Other Fuel Oils, Lube Oil & Greases (23)
- Other Chemicals and Related Products (32)
- Coal, Lignite & Coal Coke (10)
- Other Commodities

# Rollup Reach Commodity Draft vs. Average Yearly Tons for AllShipments

Scenario #2  
45' Authorized

Reset zoom



- Gasoline, Jet Fuel, Kerosene (22)
- All Manufactured Equipment, Machinery and Products (70)
- Distillate, Residual & Other Fuel Oils, Lube Oil & Greases (23)
- Other Chemicals and Related Products (32)
- Coal, Lignite & Coal Coke (10)
- Other Commodities

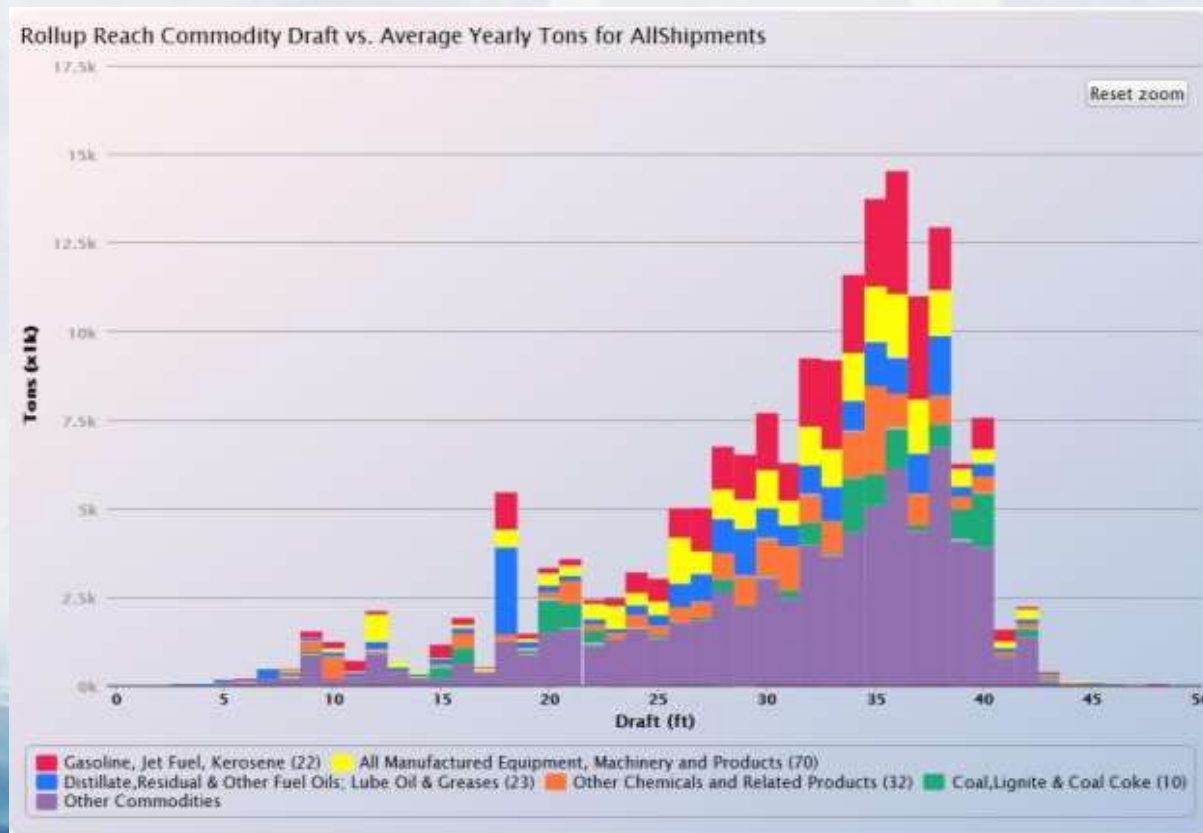


Target Elevation (ft)	Time until Dredging Takes place (Years)						
	1	1.5	2	2.5	3	3.5	4
45	29.780	33.293	33.286	32.103	30.798	29.711	28.932
44	33.343	38.859	39.396	38.043	36.305	34.736	33.522
43	37.828	46.603	48.197	46.626	44.157	41.757	39.796
42	38.561	49.827	53.110	52.169	49.702	47.033	44.751
41	39.578	53.944	59.650	59.750	57.371	54.339	51.590
40	39.395	55.069	62.903	64.241	62.385	59.479	56.637
39	29.471	42.303	50.100	52.345	51.539	49.542	47.349
38	24.186	35.129	42.638	45.605	45.510	44.107	42.394
37	19.914	29.275	36.467	40.037	40.581	39.714	38.434
36	15.738	23.268	29.444	32.996	34.039	33.648	32.773
35	12.886	19.160	24.643	28.227	29.697	29.695	29.141
34	9.591	14.299	18.545	21.598	23.108	23.422	23.170
33	7.996	11.954	15.636	18.527	20.185	20.770	20.734
32	6.692	10.016	13.166	15.759	17.429	18.189	18.355
31	5.438	8.148	10.764	13.019	14.627	15.500	15.829
30	4.638	6.952	9.207	11.210	12.738	13.668	14.127
29	3.996	5.992	7.955	9.751	11.211	12.190	12.765
28	3.124	4.685	6.227	7.668	8.879	9.765	10.332
27	2.251	3.377	4.493	5.558	6.483	7.214	7.718
26	1.719	2.579	3.434	4.259	4.994	5.601	6.052
25	1.170	1.755	2.338	2.907	3.428	3.875	4.232



# Cargo Disruption

- Can be a function of tonnage and/or cargo value
- Developed on reach level per foot of draft



# Summary

- Better understand each channels utilization as it relates to authorization
- Express disruptions as it relates to ship utilization
- Provide best channel availability based on utilization on highest risk areas - due to constrained budgets

An aerial photograph of an offshore oil rig in the middle of the ocean. The rig is a complex of white and yellow structures, including a central derrick and various platforms. A large, vibrant rainbow is visible in the sky, arching over the rig. The water is a deep blue, and the sky is clear. The text "QUESTIONS?" is overlaid in the center of the image.

*QUESTIONS?*

