

4000



Table 2. Comparison of Rating Curve Depth Estimates Made by Experts in the Salt River Navigability Case Using Equal Flow Rates		
Expert	Segment 6	
	Depths	
Fuller		
1760 cfs	2.9-5.0 ft	
581 cfs	1.6-2.3 ft	
86 cfs	0.5-1.0 ft	
Gookin		
Mean Annual (1760 cfs)	2.15 ft	
Median Daily (581 cfs)	1.35 ft	
Minimum Flow (86 cfs)	0.55 ft	
Mussetter (new sections only)		
1760 cfs	2.3-3.3 ft	
581 cfs	1.4-1.8 ft	
86 cfs	0.5-0.6 ft	
<b>Segment 2 (Average Depths)</b>		
Fuller		
298 cfs	0.8-2.6 ft	
623 cfs	1.2-3.4 ft	
Burtell		
Median Daily 50% (<298 cfs)	< 1.7 ft	
75% Flow (<623 cfs)	< 2.2 ft	
<b>Segment 3 (Maximum Depths)</b>		
Fuller		
456 cfs	2.4-6.2 ft	
977 cfs	3.1-8.3 ft	
Burtell		
Median Daily 50% (<456 cfs)	< 1.6-2.3 ft	
75% Flow (< 977 cfs)	< 2.4-2.7 ft	

significantly underestimates the typical flow depths in Segment 3, but is broadly representative of the shallowest riffles that would have existed in that segment.

- Segment 2. Use Mr. Burtell’s mean depth rating curve from the Chrysotile gage data, but being mindful of the fact that the maximum depth is likely up to two times the mean depth shown.
- Segment 1. No party is advocating navigability, no further analysis of rating curves is needed.

Given the assumptions and criteria listed above, the recommended flow depths for the Salt River are shown in **Table 6**.

Segment	Flow Rate Type					
	Mean Annual	Median Annual	10% (Entire Year)	Median Daily (Entire Year)	90% (Entire Year)	High-Flow Boating Season
2	2.2 ft	2.0 ft	1.2 ft	1.6 ft	3.0 ft	1.3-2.8 ft
3	2.3 ft	2.0 ft	1.2 ft	2.5 ft	3.0 ft	2.5-2.8 ft
4	2.6 ft	2.2 ft	1.2 ft	2.6 ft	3.2 ft	2.5-3.0 ft
5	2.6 ft	2.3 ft	1.1 ft	1.6 ft	3.8 ft	1.7-3.6 ft
6	2.2-4.9 ft	1.9-4.2 ft	1.3-2.6 ft	1.6-3.4 ft	2.8-5.8 ft	1.7-5.5 ft.

Notes:

1. Segments 2-4: Depths are for conditions at the head of a riffle, i.e., they are limiting depths not typical depths.
2. Segment 5: Depths shown are for non-pool sections of the river, i.e. they are limiting depths.
3. Segment 6: The low-end depths shown are for limiting conditions in shallow riffles, i.e., they are limiting depths.
4. Average depth of the rating section is shown for Segment 2.
5. Maximum depth of the rating section is shown for Segments 3, 4, 5, & 6.
6. The high-flow, or boating, season depths are based on the high and low median daily flow rates during the period from mid-February to mid-May.

The depths shown in **Table 6** can be used to determine the types of boats able to be used at various flow rates in each river segment. Given that the depths in **Table 6** are limiting depths, the rating curve data suggest that boats that draw less than 1 foot could be used more than 90% of the time on every river segment, and that boats drawing 2.0 feet could be ordinarily used during the high-flow season.