

## Canal and Ditch Turnouts Capacity in CFS

HEAD - FT	Pipe Diameter in Inches						
	8"	10"	12"	15"	18"	21"	24"
0.7	1.6	2.5	3.6	5.3	7.3	9.5	11.9
1.0	1.9	2.9	4.2	6.4	9.0	11.9	14.9
1.5	2.2	3.5	5.0	7.7	11.0	14.8	19.5
2.0	2.6	4.0	5.7	8.8	12.6	17.0	22.0
2.5	2.8	4.4	6.3	9.8	14.0	19.0	24.6
3.0	3.1	4.8	6.9	10.7	15.3	20.7	26.9
3.5	3.3	5.2	7.4	11.5	16.5	22.4	29.0
4.0	3.5	5.5	7.9	12.3	17.6	23.9	31.0

### NOTES:

1. HEAD - Distance from the water surface in the ditch or canal to the water surface in the field. Assume the water depth in the field to be 0.3 feet (3.6 inches).
2. The pipe is assumed to be 10 feet long, level, and have an "n" value of 0.015
3. The centerline of the outlet of the pipe is assumed to be at the level of the field.
4. The yellow zone of the chart represents a velocity of over 7 fps. This is important to consider in order to reduce erosion. Velocity over 10 fps is represented by the red zone.

**Example:** A 12" diameter turnout with 2.5 feet of head will flow about 6.3 cfs. The velocity of the water is in the yellow zone and erosion protection measures should be considered.