

## Mesariya -1 Dam

Location	22.4553° N, 71.0939° E
State	Gujarat
Nearest City	Wankaner
Year of Completion	1982
Operated and Maintained by	Gujarat Engineering Research Institute
River Basin	Sabarmati
River	T-Machhu
Dam Type	Earthfill Embankment
Height above lowest foundation level	14.0 m
Dam length	570.0 m
Reservoir Area	1043007.0 m <sup>2</sup>
Gross storage capacity	4520000.0 m <sup>3</sup>
Effective storage capacity	3810000.0 m <sup>3</sup>

## CATCHMENT CHARACTERISTICS

Catchment Properties	Values
Area of catchment	54.8 km <sup>2</sup>
Perimeter of catchment	45.3 km
Basin Length	13984.0 m
Form factor	0.28032
Circularity ratio	0.33648
Elongation ratio	0.59723
Highest Stream order	6
Max elevation	321.0 m
Min elevation	160.0 m
Mean bifurcation ratio	4.3325
Stream frequency	76.2380 per km <sup>2</sup>
Relief	161.00 m
Drainage density	10.3880 km/km <sup>2</sup>
Length of overland flow	48.133 m

## CATCHMENT CLIMATOLOGY

