

Engineer's Opinion of Construction and Engineering Cost for Hallsville, Missouri
Wastewater Treatment Plant (WWTP)

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Estimated Design Flow:

Permitted Flow based on MSOP	212,622 gpd
Currently approved 322 lots	<u>119,100 gpd</u>
Total	331,722 gpd

Current ADF per MSOP	149,568 gpd
Currently Approved lots	<u>119,100 gpd</u>
Total	268,668 gpd

For estimating purposes, use 300,000 gpd (gallons per day) Average Daily Flow (ADF)

(MSOP Missouri State Operating Permit)

Research from McClure files for construction cost using bids and recent detailed estimates.

Advanced Mechanical WWTP, Bid Summer 2020, 0.98 MGD ADF

Bid Price \$15,000,000

Construction Cost Per Gallon \$15.30

Advanced Mechanical WWTP, Bid 2013 for BCRSD, 0.46 MGD ADF

Final Construction Price \$6,047,335

Construction Cost Per Gallon \$13.14

Lagoon Enhancement, Estimated 2020, 0.16 MGD ADF

Estimated Construction Cost \$2,000,000

Estimated Construction Cost Per Gallon \$12.50

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Lagoon Enhancement, Estimated 2020, 0.23 MGD ADF

Estimated Construction Cost \$2,823,000

Estimated Construction Cost Per Gallon \$12.23

Considering that it is likely that an advanced wastewater treatment plant will be required in Boone County, use \$15.00 per gallon of wastewater treatment plant capacity.

- Use 300,000 gpd x \$15.00/ gallon = \$4,500,000 construction cost,
- Use 20% of construction cost for contingencies for preliminary estimates,
- Use 20% of construction cost for engineering,
- Land acquisition and financing costs are not included.

Estimated Construction Cost	\$4,500,000
Contingencies	\$ 900,000
Engineering	<u>\$ 900,000</u>
<i>Total Opinion of Construction and Engineering</i>	<i>\$6,300,000</i>



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