



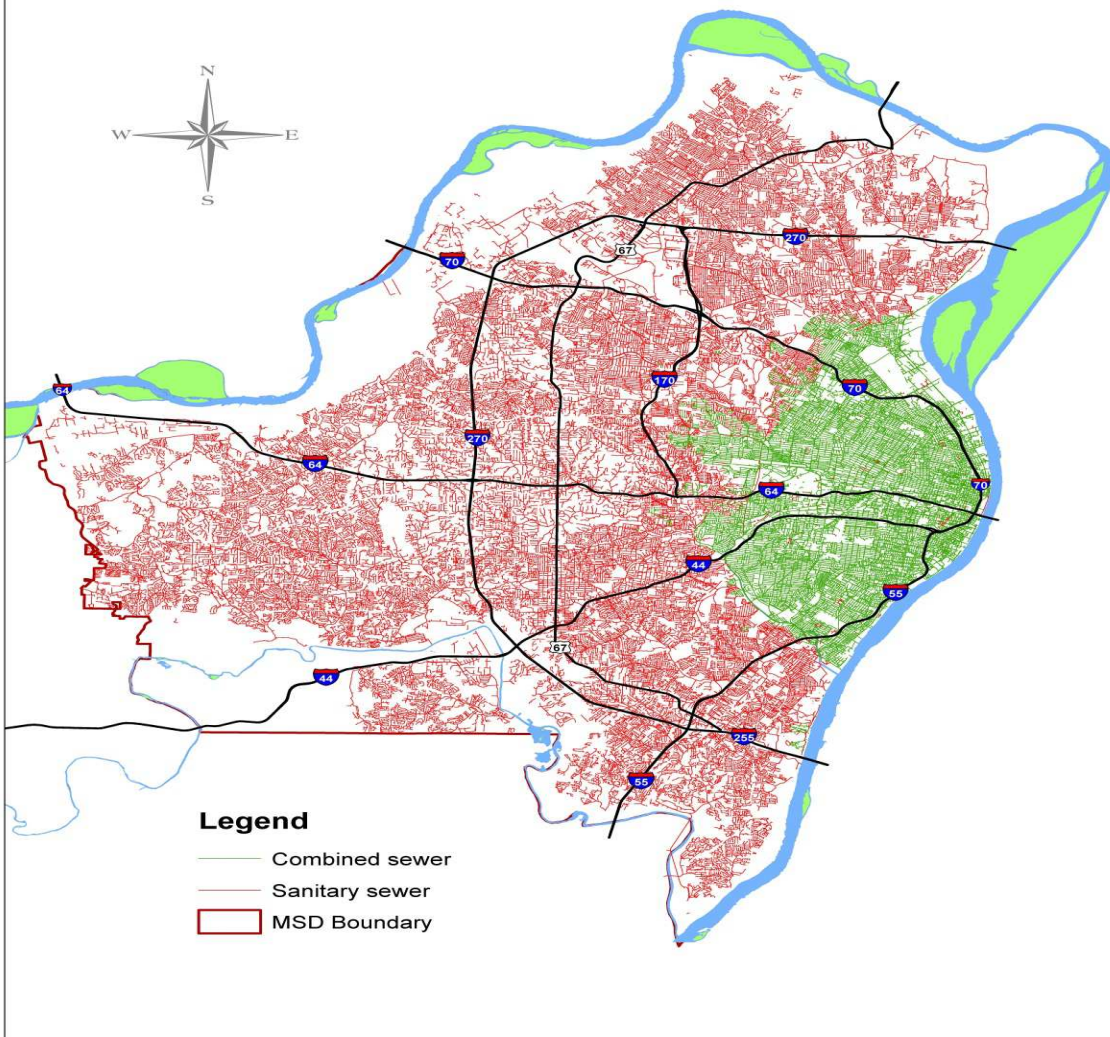
Water Energy Nexus

The life of a drop of water

MSD System Overview & Details

- Two utilities: wastewater and stormwater
- 525 square mile service area
- 1,300,000 customers
- 90 municipalities served
- 7 treatment plants
- 356 million gallons/day wastewater treated
- 4,700+ miles of separate sanitary sewers
- 1,800+ miles of combined sewers
- 3,000+ miles of stormwater sewers
- 4th largest sewer system in US (by miles of sewers that handle wastewater)

The Metropolitan St. Louis Sewer District
SANITARY/COMBINED SEWER SYSTEM



4th Largest Collection System in
the Country*

9,531 Total Miles of Sewers
9,402 Miles Rely on Gravity
3,025 Miles of Storm Sewers

* When measuring sewers that handle
wastewater

		Office Phone	Mobile Phone
Division Manager	Rob Daly	(314)-861-6706	(314)-267-6179
Division Engineer	Jay Kniker	(314)-436-8703	(314)-267-0663
Bissell Pump Supervisor	Tom Broaders	(314)-436-8707	(314)-267-3507
Lemay Pump Supervisor	Mark Barton	(314)-638-5879	(314)-568-1771
County Pump Supervisor	Mark Bright	(314)-861-6735	(314)-267-3491

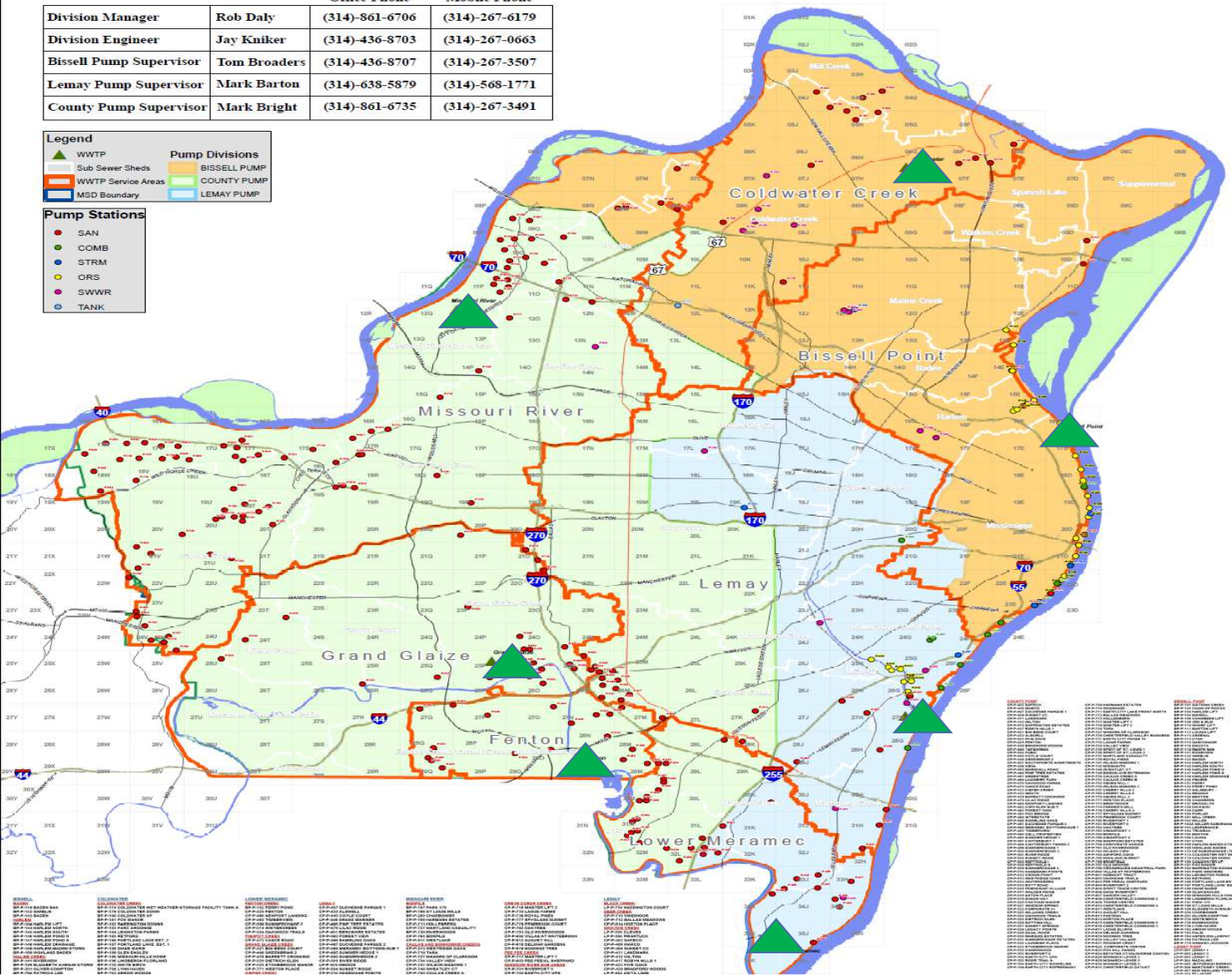
Legend

WWTP
 Sub Sewer Sheds
 WWTP Service Areas
 MSD Boundary

Pump Divisions
 BISSELL PUMP
 COUNTY PUMP
 LEMAY PUMP

Pump Stations

- SAN
- COMB
- STRM
- ORS
- SWWR
- TANK



Pump Stations

277 Pump Stations
207 Sanitary

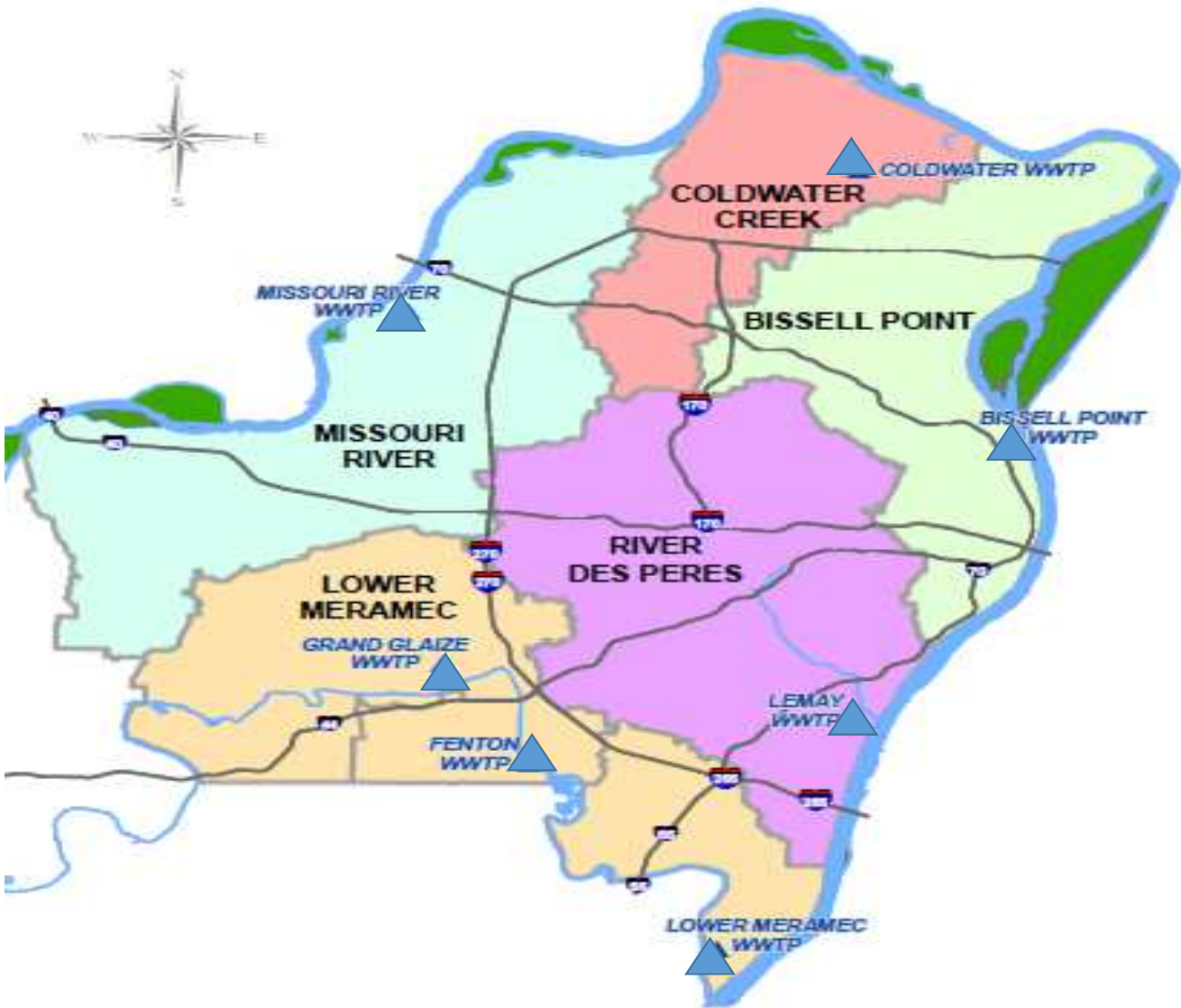
\$2,828,000 electrical use
22% of total electrical use

\$115,000 gas use
6% of total gas use

Station ID	Station Name	Station Type	Station Location
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102	102	Sanitary	St. Louis
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277	277	Sanitary	St. Louis

Pump Station Flow Line to Missouri River Treatment Plant



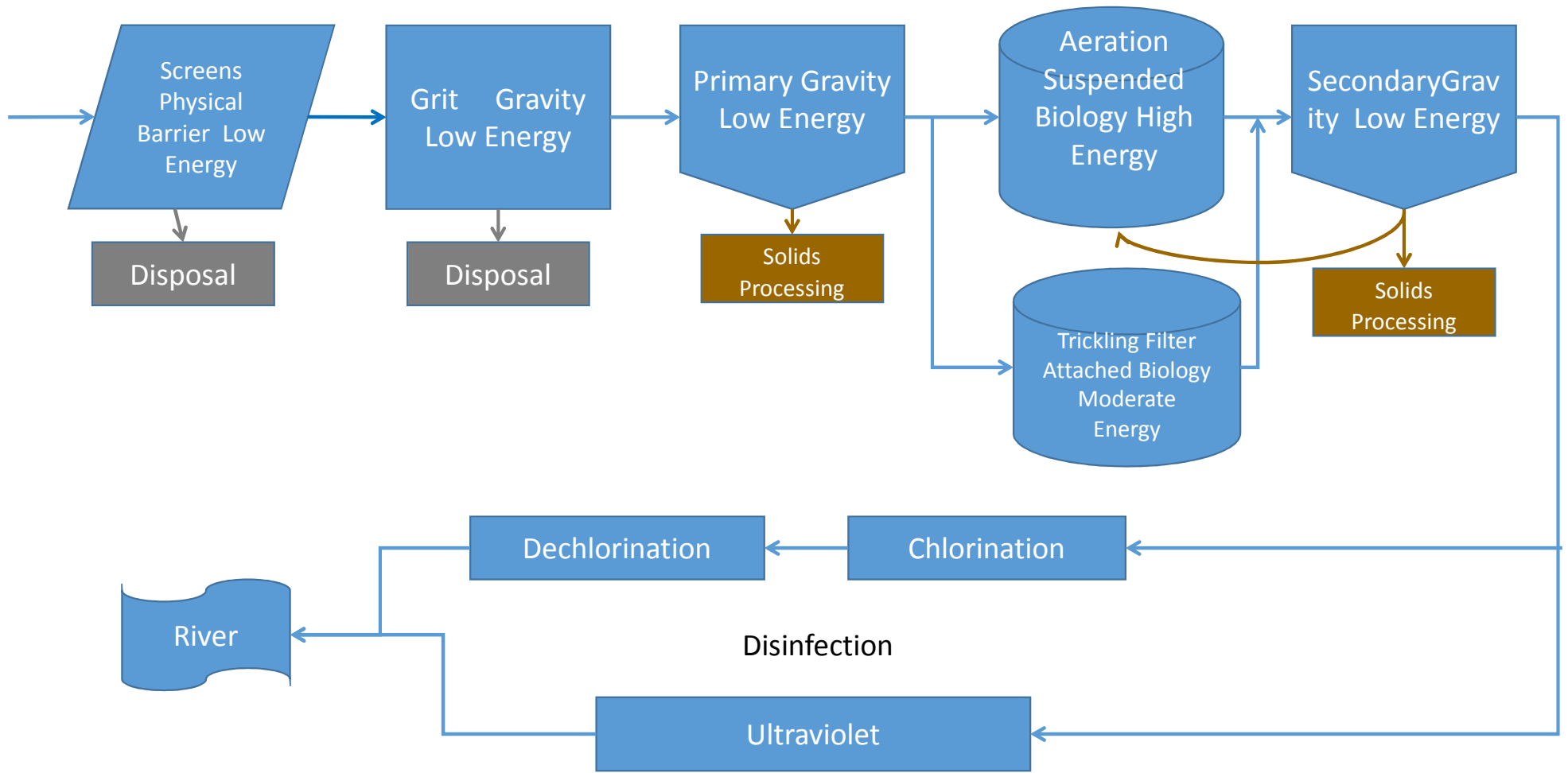


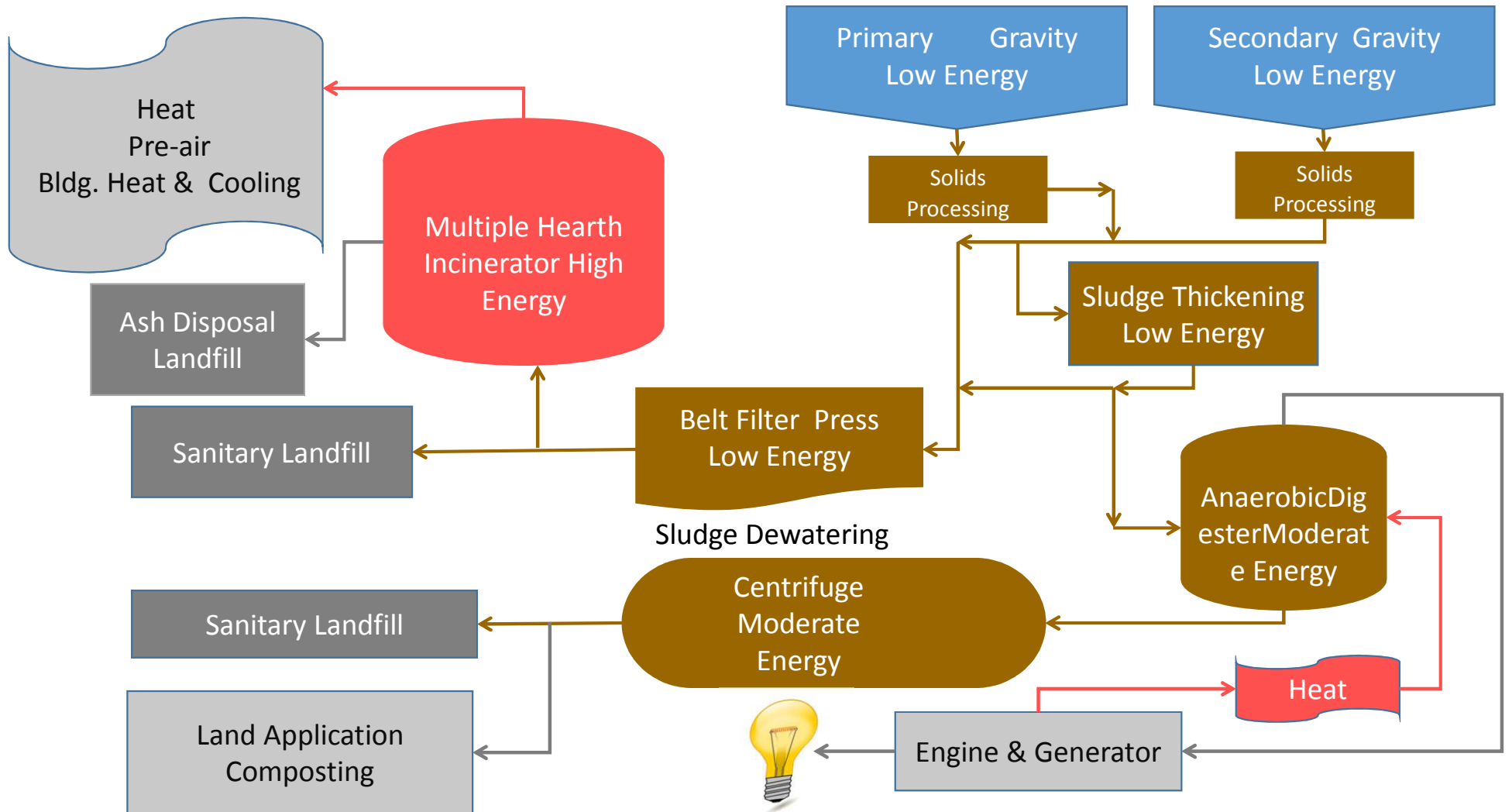
Treatment Plants

- 350 MGD Bissell Point
- 40 MGD Coldwater
- 6.75 MGD Fenton
- 21 MGD Grand Glaize
- 340 MGD Lemay
- 15 MGD Lower Meramec
- 38 MGD Missouri River

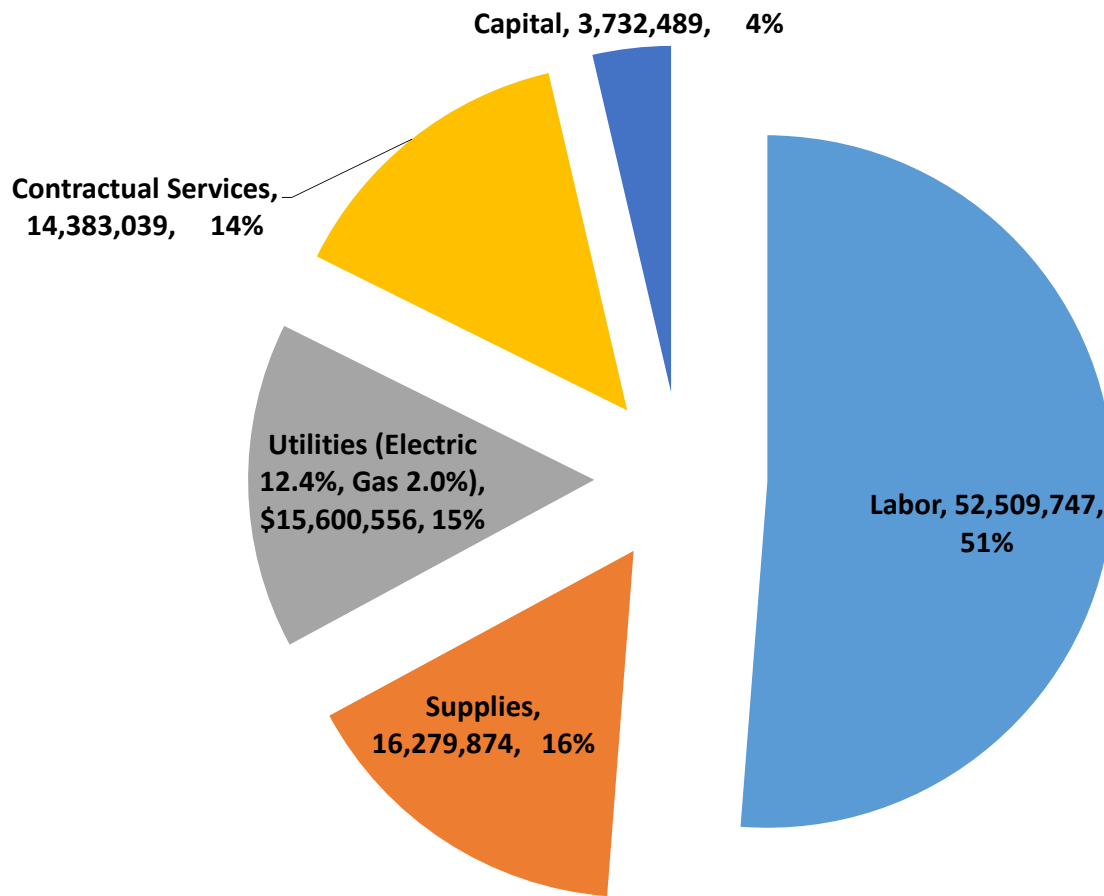
\$9,834,000 electrical use
78% of total electrical use

\$1,985,000 gas use
94% of total gas use





14-15 Total Operations Costs \$102,505,700



O & M Costs Penny Per Gallon
Total Cost 0.086

