

BioSAT: Dashboard Analysis Flow

After all user inputs have been chosen...

Sort 1*: Remove *Site ZCTAs* outside the *Analysis Area*

Sort 2: Remove *Supply ZCTAs* that are outside the *Travel Distance* from the *Analysis Area* or *Site ZCTA* - This creates the *Bioshed(s)*

Calc 1: Calculate *Bioshed's* cumulative quantity of the *Biomass Type* for the *Site ZCTA*, or each *Site ZCTA* in the *Analysis Area*

Sort 3*: Remove *Site ZCTAs* with *Biosheds* that have cumulated quantities less than the *Annual Biomass Demand Quantity*

Calc 2: Calculate each *Supply ZCTA's* *Transportation Cost*

Calc 3: Calculate each *Supply ZCTA's* *Supply Cost* - *Supply Cost* includes *Resource Cost* and/or *Harvesting Cost*

Calc 4: Calculate each *Supply ZCTA's* *Total Cost*

Calc 5: Calculate each *Supply ZCTA's* *Marginal Cost*

Sort 4: Sort *Supply ZCTAs* ascendingly by *Marginal Cost*

Calc 6*: Calculate the *Supply ZCTA's* cumulative quantities

Calc 7*: Calculate the *Supply ZCTA's* cumulative costs

Calc 8*: Calculate each *Bioshed's* *Transportation Cost* at the *Annual Biomass Demand Quantity*

Calc 9*: Calculate each *Bioshed's* *Supply Cost* at the *Annual Biomass Demand Quantity*

Calc 10*: Calculate each *Bioshed's* *Total Cost* at the *Annual Biomass Demand Quantity*

Sort 5*: Sort *Site ZCTAs* ascendingly by their *Biosheds' Total Cost*

For One ZCTA Analysis: Display table for the *Bioshed*

For Top Sites Analysis: Display table for the top 20 *Site ZCTAs* – *Site ZCTAs* with *Biosheds* that have the 20 lowest *Total Costs* at the *Annual Biomass Demand Quantity*

*This step is not necessary for *One ZCTA Analysis*. It is used in *Top Sites Analysis* only.