Do you want to create one or many imputed datasets?

Multiple Imputation (recommended)

1. Select your imputation method of choice, bootstrap or Bayesian: *impute.boot()* or *impute.univariate.bayesian.mi()*
2. Do WQS: *do.many.wqs()*
3. Pool the results: *pool.mi()*

one

many (recommended)

Single Imputation (not recommended)

1. Select your imputation method of choice, bootstrap or Bayesian *impute.boot()* or *impute.univariate.bayesian.mi()*
2. Do WQS: *estimate.wqs()*

Do you have missing components?

WQS Regression: *estimate.wqs()*

yes

no

Do you impute and know the detection limits?

no

yes

Use BDLQ1 approach: *estimate.wqs()*

How many chemicals have under 80% of their values BDL?

many

few

**Figure 2:** A decision tree to use the **miWQS** package. It is flexible and can meet a wide range of needs.