1. **Value Proposition 1: Public and Planner Define benefit to NRCS**

**For** the public and the agency conservation planners **Who** are searching for conservation solutions for site specific soil properties and land uses.

**The** soils interpretations generator **Is a** tool that uses soil properties information for specific site locations and land use to assist conservation planners to recommend effective conservation solutions for a customer’s land. The tool will support the new approach for assessing solutions and ranking for funding consideration.

**Unlike** the current tool which was designed for large scale planning, not detailed enough for site specific locations such as a producer’s field or part of a field.

**Our solution** will guide the user through selecting soil properties and characteristics, topography, climate and other data, and run the soil interpretations generator to obtain results for a specific site.

1. **Value Streams:** 
   1. **Value Stream 1 - NRCS Planner or Customer at Land Unit level**
      1. Triggering Event: A NRCS Planner or Customer is doing a land unit vulnerability assessment. The user identifies one or more soil related resource concerns such as soil erosion, flooding, …etc. User wants to review the underlying soil interpretations data to evaluate whether it is correct for that specific field or pasture.
      2. User invokes interface to display the details about the underlying factors and data that resulted in the current soil rating.
      3. User identified that some of the underlying soil survey data at a broad geographic soil region level are not correct for the specific field or pasture. The user wants to create a more custom rating by entering more specific field data based upon site evaluation.
      4. User Graphical interface will walk the user through process of modifying input data, regenerating the soil interpretation and obtaining the custom output.
      5. Identification of land use, soil properties and site characteristics. Examples: Slope, depth of water table, surface texture.
      6. Allow user to change input data and re-run the analysis.
2. **Value Proposition 2: State Conservation Staff – State Resource Assessment Evaluations - Benefit to NRCS**

**For** State Conservation Staff and State Soil Scientists **Who** are developing or using soil interpretations for State Resource Assessments in support of Programs (Farm Bill Programs) resource initiatives. This supports congressionally mandated reporting.

**The** soils interpretations generator **Is a** tool that uses a variety of input data to develop predictions for effect on land use and resources at a state level based upon soil property, climatic variations, and other factors.

**Unlike** the current tool which is limited to one data source.

**Our solution** will provide a soil interpretive generator that includes other input such as topography, climate, wildlife data, and other data, and run the soil interpretations generator to obtain results at a state level to support congressional reporting.

* 1. **Value Stream 2 – State Conservation Staff and State Soil Scientist at broad geographic soil region level**
     1. Triggering Event: A NRCS State Conservation Staff member or State Soil Scientist needs a State geographic soil interpretation for a land use for resource assessments for the State.
     2. User determines if a State soils interpretation is already available to meet their needs, and if not they need to create a new one.
     3. Identification of soil properties and site characteristics.
     4. User wants to review what type of authoritative data is available for input.
     5. Select Potential Data sources for input. Examples: laboratory results, site physical soil description, topographic data, hydrologic data, National spatial layers, climate data, wildlife data, etc.
     6. Develop interpretation criteria, rules and model to be used
     7. Run the model, review the results comparing to other performance data to verify. For example, the output might be compared to yields or some other performance measurement.
     8. Determine what parts of the model are not optimal.
     9. Iterative process to run and re-run using different parameters or input and allow user to change criteria, input data, rules, and re-run the analysis.
     10. Submit for a national review or peer review
     11. When interpretation is approved incorporate into the official list of interpretations available for public use.

1. **Value Proposition 3: National Conservation Staff – National or Regional Resource Assessment Evaluations - Benefit to NRCS**

**For** National Conservation Staff and National Soil Scientists **Who** are developing or using soil interpretations for National or Regional Resource Assessments in support of Programs (Farm Bill Programs) resource initiatives. This supports congressionally mandated reporting, disaster recovery and other intiatives.

**The** soils interpretations generator **Is a** tool that uses a variety of input data to develop predictions for soil property impact on land use.

**Unlike** the current tool which was limited to one data source.

**Our solution** will provide a soil interpretive generator that includes other input such as topography, climate, wildlife data, and other data, and run the soil interpretations generator to obtain results any size geographic area.

* 1. **Value Stream 3 – National Conservation Staff and State Soil Scientist at broad geographic soil region level**
     1. Triggering Event: A National State Conservation Staff member or National Soil Scientist needs a National or Regional geographic soil interpretation for a land use for resource assessments for the State.
     2. User determines if a State soils interpretation is already available to meet their needs, and if not they need to create a new one.
     3. Identification of soil properties and site characteristics.
     4. User wants to review what type of authoritative data is available for input.
     5. Select Potential Data sources for input. Examples: laboratory results, site physical soil description, topographic data, hydrologic data, National spatial layers, climate data, wildlife data, etc.
     6. Develop interpretation criteria, rules and model to be used
     7. Run the model, review the results comparing to other performance data to verify. For example, the output might be compared to yields or some other performance measurement.
     8. Determine what parts of the model are not optimal.
     9. Iterative process to run and re-run using different parameters or input and allow user to change criteria, input data, rules, and re-run the analysis.
     10. Submit for a national review or peer review
     11. When interpretation is approved incorporate into the official list of interpretations available for public use.