

Management History – Interview

The following questions are offered as examples to guide a conversation with the client and help the planner more thoroughly understand current conditions, the client's management and how these may contribute to existing soil health resource concerns. Answers to these and other similar questions will be helpful in assessing some of the indicators.

1. What is the crop rotation?

2. Describe your tillage system?

3. How long have you been in this management system and are you considering any changes?

4. For how many months per year is the soil surface at least 75 percent (estimated) covered with plants, residue or mulch?

5. Is cropland grazed? List animal type, number and weight.

6. Are cover crops a consistent part of the cropping system? If yes, for how many years has the field been continually cover cropped?

7. How are the cover crops terminated?

Management History – Interview Cont'd

8. What integrated pest management strategies are used (e.g., crop scouting, selective spraying, treated seeds)?

9. What nutrient management strategies are used (e.g., banding, split application, use of the 4Rs, manure/biochar/compost)?

10. Is the field irrigated? If yes, what type of irrigation system and how many acre-inches are applied for each crop in the rotation described above?

11. Does water pond or run off during or immediately after typical rainfall or irrigation events? Where in the field?

12. Are there problems with crop emergence or early crop growth? Where in the field?

13. Is water management a concern (i.e., field too wet or too dry at planting)?

Other observations not captured in the assessment including plant condition and recent weather and landscape characteristics that may affect assessment results:

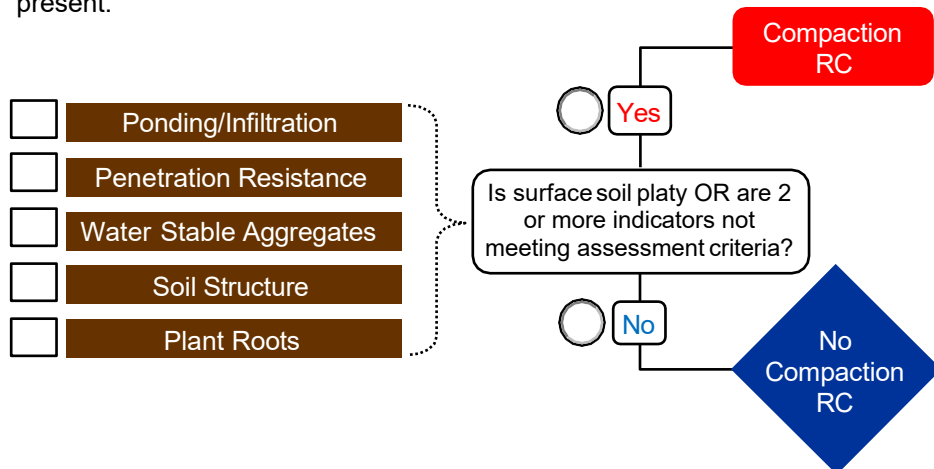
NRCS Idaho Cropland In-Field Soil Health Assessment Worksheet

Soil Health Resource Concerns ☐ CPT : Compaction ☐ SOM : Soil Organic Matter Depletion ☐ AGG : Aggregate Instability ☐ HAB : Soil Organism Habitat Loss or Degradation Location Field/CMU Tract # Client/Customer Planner Date Soil Map Units Soil Moisture Surface Horizon Texture	Indicator Timing and Use Anytime ☀️ After Rain or Irrigation ☁️ With Adequate Moisture 💧 Before a Tillage Event 🚜 Primarily No-Till Systems ⚙️ Before Growing Season ♻️ During Growing Season 🌿 Interview 🗣️			Meets Assessment Criteria (Yes/No)
	Soil Cover ☀️ SOM, AGG, HAB • Surface cover from dead plants, residue or mulch; cover greater than 75% (after planting)			☐ Y ☐ N
	Residue Breakdown ☀️ ⚙️ 🗣️ SOM, HAB • Natural decomposition of crop residues or organic mulch is as expected with crop and conditions			☐ Y ☐ N
	Surface Crusts 🚜 ♻️ 🌿 AGG, HAB • Crusting on no more than 5% (estimated) of the field/CMU			☐ Y ☐ N
	Ponding/Infiltration ☀️ ☁️ 🌿 🗣️ CPT, AGG • No ponding on non-hydric soils within 24 hours following typical rainfall or surface irrigation event; • OR, no infiltration difference between assessment area and fencerow sample in the same soil type; • OR, soil infiltrates 1-inch of water in 10 minutes or less (for second applied inch). (1/min x 60 = inches per hour)			☐ Y ☐ N
	Penetration Resistance 💧 🚜 ♻️ 🌿 CPT • Penetrometer rating <150 psi within top 6-inch depth and <300 psi in the 6 to 18-inch depth; • OR, slight or no resistance with wire flag inserted to 12 inches			☐ Y ☐ N
	Water-Stable Aggregates ☀️ CPT, SOM, AGG, HAB • Strainer: soil structure remains intact with aggregates apparent; • OR, Soil Quality Test Kit (SQTk)/Jornada slake box meets stability class 5 to 6; • OR, Cylinder: At least 80% (estimated) remains intact after 5 minutes with little cloudy water			☐ Y ☐ N
	Soil Structure ☀️ CPT, SOM, AGG, HAB • Granular or fine to very fine blocky surface soil structure and no platy or massive structure in top foot of soil			☐ Y ☐ N
	Soil Color 💧 SOM • No color difference between assessment area and fencerow sample in same soil type; • OR, value is on the darker range using color chart and official series description			☐ Y ☐ N
	Plant Roots 🌿 CPT, SOM, AGG, HAB • Roots covered in a soil film (rhizosheaths) or are part of soil aggregates; • OR, living roots if present are healthy, fully branched, extended and unrestricted			☐ Y ☐ N
Biological Diversity 🍄 🗣️ SOM, AGG, HAB • Evidence of 3 different types of organisms (non pest) observed or biological hot spots present and at least 8 earthworms per cubic foot in irrigated conditions / 3 earthworms foot in dryland where fence line and natural areas contain earthworms			☐ Y ☐ N	
Biopores ☀️ ⚙️ SOM, AGG, HAB • Presence of multiple intact root or earthworm channels that extend vertically through the soil with some connecting to the surface			☐ Y ☐ N	
Clear Worksheet		Clear Worksheet Except Client/Customer, Plan and Date		

Cropland In-Field Soil Health Assessment Resource Indicator Decision Trees

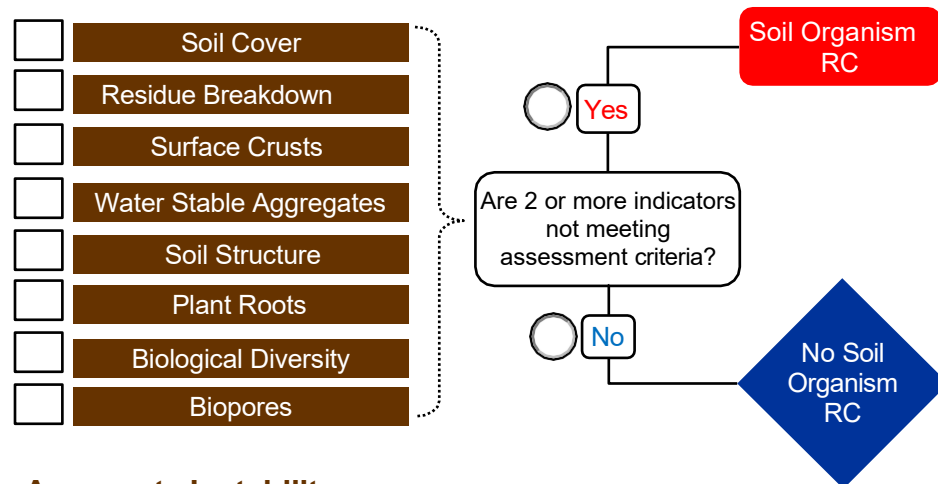
Compaction

Check the indicators that did not meeting assessment criteria during the evaluation, or are checked 'No' on page 3, and follow decision tree below to determine if the given resource concern (RC) is present.



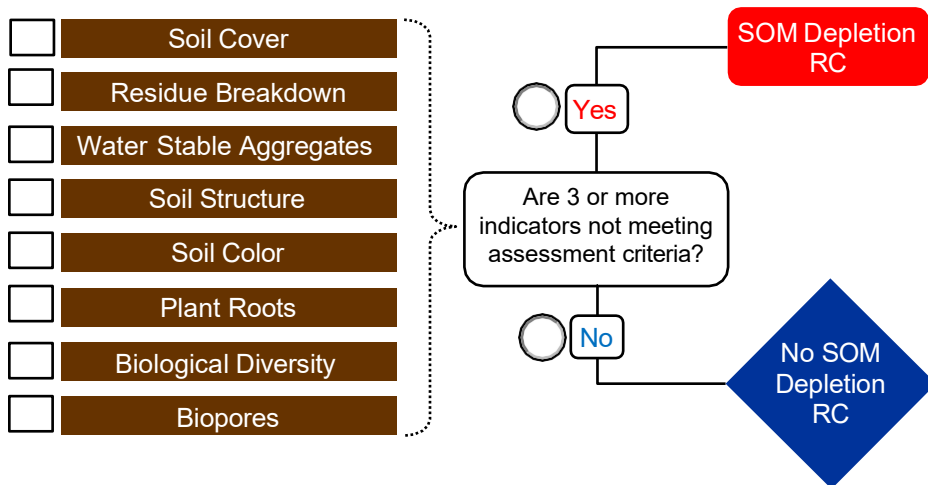
Soil Organism Habitat Loss or Degradation

Check the indicators that did not meet assessment criteria during the evaluation, or are checked 'No' on page 3, and follow decision tree below to determine if the given resource concern (RC) is present.



Soil Organic Matter Depletion

Check the indicators that did not meet assessment criteria during the evaluation, or are checked 'No' on page 3, and follow decision tree below to determine if the given resource concern (RC) is present.



Aggregate Instability

Check the indicators that did not meet assessment criteria during the evaluation, or are checked 'No' on page 3, and follow decision tree below to determine if the given resource concern (RC) is present.

