

# SWAT CERTIFIED

SWAT CERTIFIED farmers are committed to environmental stewardship.

To be SWAT CERTIFIED, every farmer:

1. **Uses SWAT MAPS annually on their entire farm** operation to optimize crop production inputs by soil potential. Crop production inputs most commonly used include organic or conventional products such as seed, soil amendments, manures, crop protection products, and fertilizers. (Note: pastures, perennial forage, and very small fields are exempt from requiring a SWAT MAP and only require a composite geo-referenced benchmark sampling system)
2. **Is working with a SWAT CERTIFIED staff member of an ag consultancy** or has their own qualified SWAT CERTIFIED staff. The validating professional must have completed required SWAT ACADEMY courses in the field of soil mapping, site-specific agronomy or 4R Nutrient Stewardship. Farmer validation occurs annually on July 1.
3. **Uses variable-rate equipment** to apply crop production inputs by soil potential.
4. **Soil tests annually by SWAT zone** to monitor soil nutrient supply to optimize crop production inputs. Soil testing may not be required in cases where plant tissues are the accepted agronomy practice (such as corn stalk N) or prior to low fertilizer intensity cropping systems (such as intercrops, forages, and annual grain legumes) but fertilizer, manures, or amendments may still be applied by SWAT zone as required.
5. **Manages crop production inputs by SWAT zone** to reduce environmental impact such as:
  - a. Nitrogen rates and products are managed to reduce the probability of denitrification, nitrous oxide emissions, leaching potential, and improve nutrient use efficiency to reduce overall greenhouse gas emissions (such as N<sub>2</sub>O, a recognized climate impacting gas).
  - b. Areas of high phosphorus and runoff risk are managed in a way to optimize soil phosphorus levels and minimize applications in high risk areas where phosphorus load in surface water may cause eutrophication (algal blooms).
  - c. Variable rate seed, crop types, varieties/hybrids, and cover crops are utilized to achieve optimal establishment of crops in SWAT zones, maximize use of available nutrients and sequester carbon.
  - d. Soil applied crop protection products are applied by the SWAT zone, to ensure correct labelled rates are applied to different soil types (where applicable), mitigating runoff, leaching, and future crop injury concerns (such as over application on low OM areas).
  - e. Marginal soils (salt affected areas, eroded knolls, etc.) are managed specifically to improve soil health over time, sequester carbon, and promote species diversity that best suits the soil condition.
6. **Uses SWAT RECORDS to store their data** including SWAT MAPS files, soil sampling point data, and crop production records of variable rate applications. Data is owned by the farmer and not available for export without their consent.

For more information or ways to benefit from being SWAT CERTIFIED please email [support@swatmaps.com](mailto:support@swatmaps.com).