

The following information is a thought experiment, not an actual program proposal endorsed or supported by VAAFM

Draft Approach 5: In-Field Observation

A percent of all cropland and pasture fields managed by a farmer are observed and given a “Soil Stewardship Score” using a different rubric for each land use type (e.g. hay, crop, pasture, veggie). Rubric is based on NRCS sheets for each land use type (such as the [National Pasture Condition Score Sheet](#)) and tied to directly observable/quantifiable metrics e.g. height of residual, livestock exclusion, % soil coverage, width of buffer, etc. Farms are paid “best” rate of \$29.89/acre if farm surpasses the highest threshold, paid “good” rate of \$20.68/ac if surpasses slightly lower threshold.

Pros:

- Relatively straightforward
- Low data need
- Can incorporate a variety of landuses and can observationally estimate metrics such as biodiversity
- Easier access for smaller farms than more explicitly performance-based programs
- Potential to add in public recognition component (e.g. signage)

Cons:

- Not tied to any quantifiable Ecosystem Service (only directional indication of “better” or “worse” management across a variety of factors)
- High need for Technical Staff time
- Not additional - does not incentivize improvements.
- Potential for discrepancies in qualitative observations - Technical staff would need training to ensure that observations by different individuals are mostly equivalent
- Does not help meet state and federal needs (e.g. practice accounting for P reductions or carbon sequestration)
- Few opportunities to further regional research through a program of this nature.

Possible Program Details/Considerations:

Ecosystem Service Valued: ??? Assumes loose combination of water quality, carbon sequestration, and promotion of biodiversity.

Output: Performance – “Soil Stewardship Score”

Quantification: In-field observations

1. Use scoring rubrics based on NRCS score sheets and regional scientific literature.

‘Whole Farm’ Consideration:

- a. A farmer would be required to submit all fields under management for evaluation in the program.
- b. Unanswered considerations:
 1. *Land use limitations for enrollment?*
 2. *Land tenure requirements (rented vs. owned) – all rented/managed fields would be proposed to be included*

Who Pays?

- a. PES Program Pays for:
 - ii. Technical service staff to perform observations
 - iii. Tiered threshold payments – two per-acre rates for “best” and “good” Soil Stewardship

Who Verifies?

- a. TA Provider (trained to calibrate observations)

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iv. Unanswered considerations:

1. QA/QC
2. California model of farmers sending in geotagged photos

How often Evaluate?

- a. Farms can be assessed and paid on an annual basis OR pay more, every 3 years

Payment

- a. Tiered payments: Farms are paid “best” rate of \$29.89/acre if farm surpasses the highest threshold, paid “good” rate of \$20.68/ac if surpasses slightly lower threshold. ‘Best’ or ‘good’ stewardship payments based off sum of potential payments for all ecosystem services estimated in UVM’s Technical Assessment #5.
- b. Funding source: \$1,000,000 PES GF appropriation

Baseline

- a. No baseline.

Threshold

- a. Two thresholds for a high and a moderately high score compared to other Vermont farms. Would need to be calibrated.

Farm Eligibility

- a. Major commodity crop types, veggie and pasture would be eligible
- b. All RAP farm sizes
- c. Farm must be in good standing with VAAFM

Farm Ranking

- a. First come first served based on application deadlines set by program

Payment Scenarios:

Two payment scenarios are considered for this pilot thought experiment. These payment rates are based from data reported in the PES WG Task 5: Valuation of Ecosystem Services report. Payment rate of \$29.89 / ac and \$20.68 / ac are estimated by the report to provide a possible range of achievement a farmer could hope to meet through comprehensive full-farm soil health management. These payment rates reflect all four estimated payment areas (carbon storage, flood-runoff mitigation, erosion reduction, and phosphorus retention) that could be achieved with good agronomic management. In this style of program, those benefits are all assumed to be achieved by farms that meet each of the tiered thresholds, and farms are paid accordingly. A fixed cost of 15% is considered for administration costs between program payment rates– this will need to be revisited as complexity is introduced into a program and cost to administer is fully considered.

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