



VM0042: Agricultural Land Management - major revision toward v3.0 -

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Agenda

1. Introduction: VM0042 development
2. Major revision elements for v3
3. Minor revision elements and ideas under discussion
4. Q&A

webinar will be recorded



VM0042 – overview of versions and revisions

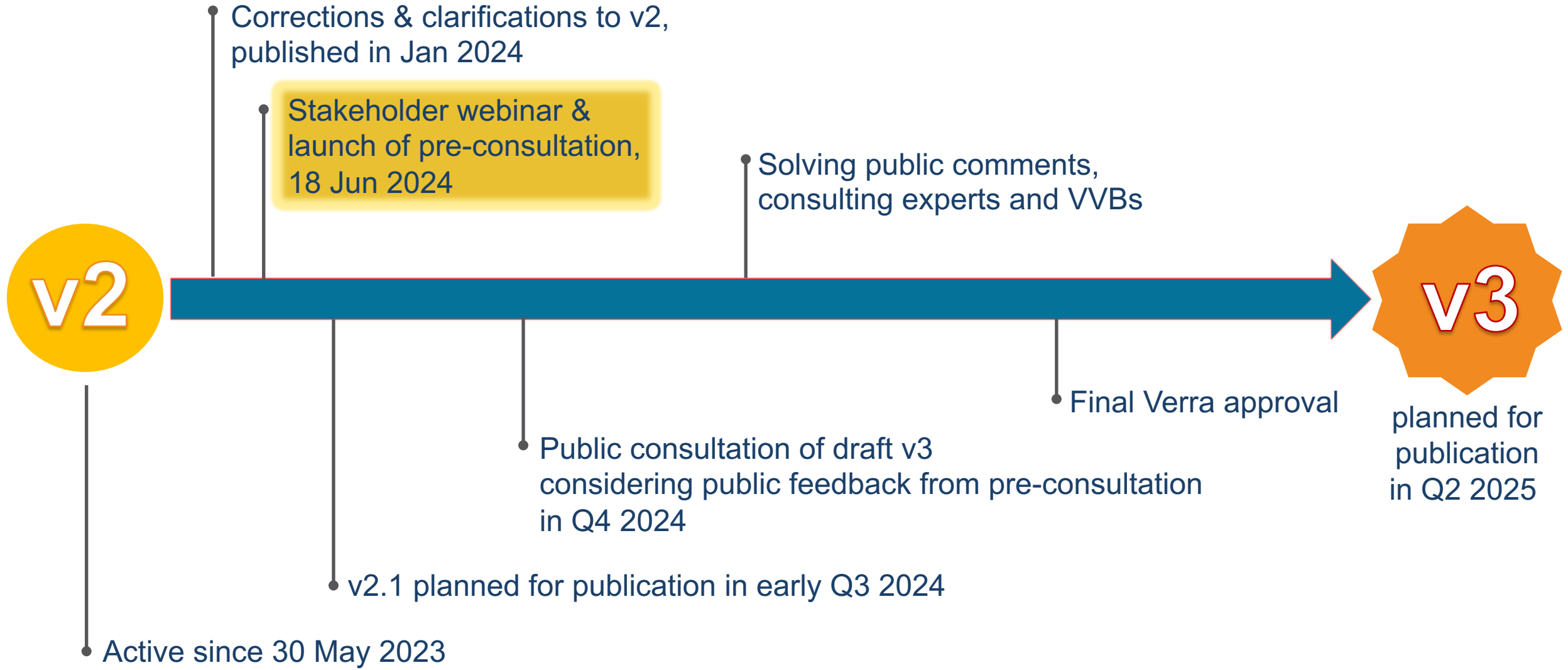
- v1, active from Oct 2020 to May 2023
 - Clarifications to v1, published Aug 2022

- v2, active since 30 May 2023
 - Corrections and clarifications to v2, published Jan 2024

 - v2.1, public consultation Apr-May 2024, expected publication Q3 2024

v2.1 minor revision focused on break down of reductions vs. removals, and embedded C&C from Jan 2024

VM0042 – process and timeline toward v3



Quantification units and stratification

Objective: Provide clear examples for how projects could determine project-appropriate quantification units and strata in different project contexts, and address if strata can change over time.

- Determine if there should be a minimum number of quantification units and strata.
- Clarify matching of baseline control sites in QA2 with respect to quantification units vs. strata.
- Ensure consistent, clear use of the terms ‘quantification unit’ and ‘stratum’/’strata’ throughout the methodology to avoid confusion.

Sampling density

Objective: Offer detailed guidance on determining sampling density *ex-ante* and assessing whether sufficient samples were collected *ex-post*.

- Expand guidance on how to determine expected heterogeneity in the project area *ex-ante*, using, e.g., reconnaissance sampling, digital soil maps, or other available data.
- Clarify when and how projects need to demonstrate that 1) the sampling design will produce an adequate sample density (at validation) and 2) the sampling density was sufficient to support verification claims (at verification).
 - Require use of a statistical test to determine the appropriate sample density *ex-ante* and to report the statistical test used and the statistical power for VVB review.
 - Provide a non-exhaustive list of statistical tests that could be used to show changes.

Sample allocation and re-measurement

Objective: Develop guidelines for sample allocation and requirements for re-measurement.

- Clarify the appropriate method(s) for sample allocation across and within strata.
- Seek public feedback on options for re-measurement requirements:
 - a) **Prescriptive approach:** set requirements around re-measurement that must be followed, allowing for a one-size-fits all uncertainty calculation.
 - b) **Flexible approach:** allow a range of re-measurement approaches, which would require the Project Proponent to ensure the project applies the appropriate uncertainty calculations and has enough statistical power to detect statistically significant change in SOC stocks over time.
- Address discrepancies between uncertainty and aggregation calculations at point vs. areal basis.

Implications of re-measurement under QA1

Objective: Clarify the purpose and implications of re-measurement and model true-up under QA1 for VCU issuance.

- Following model true-up, project proponents are required to rerun model simulations for both the baseline and project scenarios from t0 up to present day, applying uncertainty deductions using the updated model prediction error term.
- Seek public feedback on the purpose of re-measurements under QA1.
- Seek public feedback on how previous over- or under-estimations should affect VCU issuance.
- Develop differentiated guidance for QA1 vs QA2 SOC sampling and re-sampling if/as needed based on the above.

'Blended' baseline

Objective: Introduce the option to use a blended baseline when the crop rotation in the project scenario does not match the scheme of historical look-back period.

- **Current approach:** a project crop-year is compared to a specific crop-year in the baseline schedule of activities
- **'Blended' baseline:** a project crop-year is compared to an average of the outcomes in the baseline scenario across all possible crops in the historical crop rotation and the associated management activities
- Fixed crop rotation assumptions in VM0042 do not reflect real-world farming practices, which could lead to unrepresentative baselines

Woody biomass quantification / agroforestry

Objective: Reference or incorporate the MRV and accounting methods underpinning VM0047's census-based and area-based approaches, while developing VM0042-specific applicability conditions, guidance, and criteria suited to agricultural contexts.

- Enhance baseline-setting guidance for woody biomass accounting.
- Produce a separate guidance document for agroforestry and perennial tree crop projects to inform decision between VM0042 and VM0047.

Minor modifications for v3

- Extract and reorganize text on **sampling** design, collection, and analysis into a separate VM0042 appendix or handbook.
- Provide a *model validation report* template
- Ensure **leakage** (and baseline) procedures:
 - a) **do not disincentivize** crop/livestock product **diversification**
 - b) consider periodic **fluctuations of stocking rates**
- Define methodology-specific procedures to deem emission sources as *De minimis*

Further potential revision elements under discussion

- Facilitate accessibility for ‘small-holder’ based projects
- Additionality:
 - Clarify guidelines for grouped projects adding instances over time
 - Ensure Eq. 1 is only applied when practices are combined/stacked on the same land
- Expand **N-management** activities and quantification, incl. **upstream** emission accounting from synthetic fertilizer reduction
- Enhance clarity to comply with VCS Standard regarding:
 - Baseline reassessment
 - Grouped projects and adding project activity instances over time
 - Release of chemical pesticides and fertilizers

Alignment with parallel methodology developments

- Improved Management in Paddy **Rice** Production Systems

New Verra-led methodology in collaboration with ATOA Carbon:

Public consultation 11 June – 12 July 2024:

<https://verra.org/methodologies/improved-management-in-paddy-rice-production-systems/>

- VM0032: Adoption of Sustainable **Grasslands** through Adjustment of Fire and Grazing

Revision toward v2 led by Soils for the Future

- General Q&A -

For detailed feedback or questions, please complete the pre-consultation survey:

<https://forms.office.com/r/iHiBzQpgPj>



Survey sections:

1. Stakeholder information
2. Soil sampling and analysis
3. Re-measurement under Quantification Approach 1: Measure and Model
4. Equivalent soil mass
5. *'Small-holders'* - ideas to facilitate uptake in subsistence agriculture contexts
6. Woody biomass quantification / agroforestry
7. Nitrogen management
8. *'Blended'* baseline
9. Model Validation Report
10. Grasslands
11. Accounting for leakage from livestock displacement and productivity declines
12. Additionality demonstration
13. Further comments or input