

Methodological Document

BWS0001. Quantification of Water Credits from Increased Infiltration.

Process: Public Consultation

Version: June 27, 2025

The BIOCARBON WATER STANDARD (BWS) was created in response to the urgent need to conserve and sustainably manage one of the planet's most threatened resources: water. In light of growing pressure on watersheds, aquifers, and aquatic ecosystems, BioCarbon has designed an innovative program that transforms water-related actions into verifiable and quantifiable environmental assets, contributing to water security and long-term environmental and social resilience.

This program establishes a robust, technically sound, and financially viable framework for certifying projects that enhance water quality, availability, and efficient use. Through this approach, BioCarbon promotes a conservation model with measurable impact, social benefits, and financing mechanisms based on Verified Water Credits (VWCs), aligned with the Sustainable Development Goals and global agendas related to the sustainable management of water resources.

The BioCarbon Methodological Document BWS0001 "Quantification of Water Credits from Increased Infiltration" was released for public consultation on June 27, 2025, with the objective of ensuring transparency, fostering stakeholder participation, and strengthening the technical and environmental integrity of the program. The consultation process was open to a broad range of stakeholders, including technical experts, project developers, public institutions, Indigenous Peoples and Local Communities, Conformity Assessment Bodies, and environmental organizations.

This document presents a synthesis of the feedback received during the consultation period, as well as the main adjustments and improvements made to the BioCarbon Methodological Document BWS0001 in response to the comments. The contributions received have been instrumental in enhancing the clarity, applicability, and robustness of the standard, ensuring its alignment with international best practices and its relevance for projects in diverse geographical and institutional contexts.

We extend our sincere thanks to Mr. Patricio Montecinos for the time dedicated to reviewing the BioCarbon BWS0001 Methodology, and for his interest in our programs. His thoughtful suggestions and thorough evaluation were highly valuable to this process and have contributed meaningfully to the continuous improvement of our standard.

As a result of the public consultation process, Version 1.0 of the document is now presented. Annex A (below) includes the comments, observations, and suggestions received, along with the corresponding clarifications or adjustments made as part of this process.

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ANNEX A. BWS0001 Methodology - Public Consultation

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Organization: ZERO CARBONO
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Date: File received by email on July 3rd., 2025

N.	Reference (section and page in the document)	Comment, remark or suggestion (all received in Spanish)	Clarification / Adjustment
1.	Overall	No existe un capítulo que se dedique a la explicación del sistema de eficiencia hídrica o cuidado del agua que utilizarás, ejemplo: sistemas de riego eficiente, tratamiento de agua, tratamiento de riles y de como este sistema será mantenido año tras año y cuál es su tasa de % de eficiencia hídrica. Cuando tu instalas un sistema de eficiencia hídrica.... El que sea..... es sumamente importante establecer el % de ahorro de agua ya que este va directamente relacionado a la cantidad de Kw en proporción 2 es a 1 que ahorrará el proyecto en relación a la energía, que puede ser de varios miles e incluso millones de dólares.	The selection of the technological option for water conservation or management is a decision of the project owner; this technological option has to be described as part of the project design and included in the Project Document. Technology will have important implications not only in the efficiency of the implemented activities, as expressed by Mr. Montecinos, but also in the establishment and operational costs and the financial structure of the project. As mandated by the BWS, those implications must be discussed and evaluated as part of the contributions to the Sustainable Development

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		<i>Translation: There is no chapter dedicated to explaining the water efficiency or water conservation system you will use; for example: efficient irrigation systems, water treatment, wastewater treatment, and how this system will be maintained year after year and what its water efficiency % is. When you install a water efficiency system, whatever it may be, it is extremely important to establish the % of water savings since this is directly related to the amount of kW, in a 2 to 1 ratio, that the project will save in relation to energy, which can be several thousand or even millions of dollars.</i>	Goals (SDG), the identification and management of potential risks performed with the Sustainable Development Safeguards (SDS) tool, and should be monitored and confirmed/dismissed with the implementation of the projects' Monitoring Plan.
2.	Overall	Tampoco existe un capítulo que este orientado al mejoramiento del suelo en relación al proyecto, lo cual es un factor fundamental para mejorar las tasas de evapotranspiración y calidad del mismo. <i>Translation: There is also no chapter focused on soil improvement in relation to the project, which is a fundamental factor in improving evapotranspiration rates and soil quality.</i>	Indeed, there is no chapter in the BWS00001 methodology describing the way that soil conditions are improved by the projects. In fact, that description must be a substantial part of the project design, that must be included in the Project Document. But the methodology document itself should not exhaustively establish the activities to be implemented in order to improve soil conditions in the project area; on the contrary, under Section 4, the BWS00001 methodology only establishes the type of activities that can be implemented for them to be

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			considered eligible under the BioCarbon Water Standard and to eventually generate and issue Water Credits. The project owner must evaluate and support how those activities improve soil quality and have a direct effect on the infiltration rates of the area, so reducing the amount of water lost to evaporation/transpiration processes.
3.	Not available.	El estándar no establece la cantidad de años totales del proyecto, como tampoco los años retroactividad que se puedan considerar. Un productor X podría tener un sistema de riego o tratamiento de agua funcionando hace un par de años que puede cobrar créditos retro activos y de esta manera hacer que el proceso de certificación sea más lucrativo. <i>Translation: The standard does not specify the total number of years the project will last, nor does it specify the number of years of retroactive certification that can be considered. Producer X might have had an irrigation or water treatment system in operation for a</i>	The overall rules to be followed by projects aiming to use the BioCarbon Water Standard (BWS) are included in the Standard document (BioCarbon Water Standard (BWS) Sustainable Management and Conservation of Water Resources). These rules need to be satisfied by any project that aims to generate and issue Water Credits under the BWS, independently of the methodology to be used. That is why there are no sections in the methodological document establishing either the duration or the retroactivity conditions for projects developed under the Standard.

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		<i>couple of years and could collect retroactive credits, thus making the certification process more profitable.</i>	So, according to section 11.5 of the BWS, “Water Credits can be quantified for at least ten (10) years. This period can be extended for another ten (10) years, provided the reasons, objectives, and expected results for such an extension are justified”. Besides, section 11.4 of the same standard states that “Project holders may certify and register sustainable management and conservation projects with up to 3 years of retroactivity from the project’s date of registration in the BIOCARBON registry”.
4.	Not available.	No se establece si se requiere de un validador/verificador el cual es fundamental para poder darle seriedad a la venta de los créditos en mercados europeos. <i>Translation: It is not established whether a validator/verifier is required, which is essential to give seriousness to the sale of credits in European markets.</i>	Section 13 of the BWS0001 Methodology establishes that “the results obtained under this methodology will be subject to independent auditing processes, as required by the BioCarbon Water Standard (BWS)”. Consequently, Section 13 of the BWS indicates that “project holder shall ensure compliance with eligibility criteria and the requirements established in Section 10 of this Standard as a prerequisite for carrying out the auditing process, which shall be conducted by an independent, duly

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			accredited CAB”, adding that “the CAB is responsible for verifying the comprehensive fulfillment of requirements established for project certification, and for confirming that the project holder has demonstrated effective performance of management and conservation activities during monitoring periods. If such compliance is verified, the body shall issue an audit statement or declaration that formally supports the results of its evaluation.” Additionally, Section 14 of the BWS details all the requirements for such Conformity Assessment Bodies (CAB).
5.	Not available.	El cálculo de los créditos se efectúa en base a (sic) estadísticas del tiempo, evapotranspiración, sequía y lluvias, pero esto genera un sesgo importante porque está trabajando en una zona extensa en la cual pueden haber muchas actividades relacionadas al agua, esto produciría por ejemplo que un productor A que tiene un muy mal uso del agua y que se encuentra al lado de un productor B que tiene un excelente uso del recursos hídrico puede certificar y cobrar créditos	The methodology and the related monitoring plan are designed to reduce the possibility of free-riders, that is producers that could claim water credits without implementing management practices that actually generate positive results in terms of increased infiltration. Eventual free-riders can also be fended off of generating water credits because the definition of the project area must include only those zones where actual

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		porque se trabaja por zona, ahora bien, tú me puedes decir que eso se regula con los infiltradores de agua, ya que al infiltrar poca agua se está generando un mejor uso del recurso, pero dependiendo del lugar los suelos saturados no generan infiltración, por lo que se podría pensar que el uso del agua es óptimo cuando la realidad es totalmente inversa. <i>Translation: The calculation of credits is based on statistics of weather, evapotranspiration, drought and rainfall, but this generates an important bias because it is working in a large area in which there may be many activities related to water; this can cause, for example, that a producer A who has a very poor use of water and who is next to a producer B, who has an excellent use of water resources, can certify and claim credits because they work by area. Now, you can tell me that this is regulated with water infiltrators, since by infiltrating little water a better use of the resource is being generated, but depending on the place saturated soils do not generate infiltration, so one could think that the use of water is optimal when the reality is totally opposite.</i>	practices to increase infiltration are being implemented; if no activities are implemented, no additionality can be demonstrated, and no water credits are generated/issued. To improve the understanding of the methodological process to implement the project and to quantify the actual net improvement in water infiltration to the soil, and consequently the water credits to be generated, we have included section 7.3 “Prioritization of intervention areas” describing the criteria to select priority areas due to soil and water balance conditions, as well as section 7.5 “Stratification of areas within the project’s boundaries” (formerly section 8.1), since an adequate stratification will guarantee that measurements, sampling, and infiltration calculations are representative, comparable and technically sound across the project. Finally, water credits are quantified and can be generated only with detailed information on water

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			balance (rainfall, infiltration rates, and evaporation/transpiration) obtained from a stratified monitoring, and for this monitoring the methodology recommends the use of a network of automatic infiltrometers that can collect data on an almost real-time (daily) basis. Although this recommendation stands, BioCarbon acknowledges that it can represent an additional cost in terms of equipment, monitoring effort, or accessibility conditions; so, in order to avoid an unbearable financial burden on small projects, in section 8.1 “Calculation of net gains” (due to infiltration), we have included the possibility of adjusting the equations to estimate those water gains, allowing for less frequent measurements of the soil’s infiltration capacity that can be used as average values for longer periods, in the case of using manual (two-rings) infiltrometers.