

**Watershed Nature-Based and Green Infrastructure Activities
Avoiding Emissions from Water Management Gray Infrastructure
Construction and Operations Methodology v1.0**

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GHG & Co-Benefits in Watershed Carbon Credit Class

Credit Class & Methodology Review

Internal R1

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CONTENT referenced by reviewer's comment <i>e.g. Section number + paste exact text</i>	REVIEWER'S COMMENT <i>Please paste the comment from the reviewer</i>	AUTHOR'S RESPONSE <i>Please describe how the comment was addressed and include new content in quotations</i>	Reviewer's Conclusion [PASSED/REJECTED WITH COMMENTS]
1.0 "to reduce nonpoint source contamination of watersheds"	Gisel: pollution? not sure if its a better english terms but I've seen it more frequently in literature as such. "non-point pollution".	Changed to "pollution"	Passed
1.2 - The water utility would not otherwise choose the green infrastructure alternative, if not for the additional revenue offered through carbon financing.	Gisel: per our discussion, you might rephrase this in terms of proving that the green infrastructure alternatives are not what's business as usual in the watershed.	Changed to: The water utility attests in writing that the anticipated carbon revenue enables green infrastructure water quality solutions that a.) enable pre-permit action, and/or b.) provides a necessary performance risk-reduction incentive, and/or c.) generate additional demonstrated benefits to existing programs.	Passed
1.3 The methodology refers to the latest approved versions of the following tools:	Ned: Links or references would be helpful, as would brief descriptions of what each tool does	Added	
1.4 The link connects to a page with terms but the clickable definitions - the links on each term - do not work - I would suggest migrating	Tica: The link connects to a page with terms but the clickable definitions - the links on each term - do not work - I would suggest migrating definitions	Replaced with: "The definitions shall apply."	Passed

definitions here - it is also confusing that you say the definitions contained in the Glossary of CDM and then have a list of definitions - I am not clear if those are the ones from CDM or additional ones so just create a list and insert it.	here - it is also confusing that you say the definitions contained in the Glossary of CDM and then have a list of definitions - I am not clear if those are the ones from CDM or additional ones so just create a list and insert it.		
1.4 Additionality: In an environmental market, the benefit secured through the payment is deemed additional if it would not have been generated absent the payment provided by the market system	Gisel: this is the key definition , per our discussion through email, where you should adopt a different one that refers to what's additional regarding business as usual. In case you want to be more inclusive for projects that already started some years ago.	Revised: Additionality: In an environmental market, the benefit secured through the payment is deemed additional if it would not have been generated absent the payment provided by the market system. In the case of this methodology, additionality is demonstrated the water entity attests in writing that the anticipated carbon revenue enables green infrastructure water quality solutions that a.) enable pre-permit action, and/or b.) provides a necessary performance risk-reduction incentive, and/or c.) generate additional demonstrated benefits to existing programs.	Passed
1.4 Life Cycle Assessment (LCA): Methodology used to evaluate the environmental impact of a process or product. The methodology can utilize standard published Life Cycle Inventory (LCI) data. This data quantifies the environmental impact of standard products or processes.	Tica: you specify LCI And LCIA below - I would also incorporate that here as living under the umbrella of LCA	Revised to be LCA throughout	In the definition include assessment as part of the process - so add in LCIA - it is important to note process of assessment/interpretation of the data not just collection - also put in

			alphabetical order
4.1.8 Reporting and critical review of the LCA	How will you achieve transparency? Can you mention data and document licensing recommendations or requirements? There is increasing interest in the FAIR data principles (https://www.go-fair.org/fair-principles/).	Text has been edited to clarify transparency guidelines without proscribing a specific standard. Some may be limited by government records requirements.	Passed
5.1 Modeling Impacts of Watershed Activities on Water Quality	Tica: My main point of confusion with this methodology is the metrics and timelines that are measured for the green infrastructure build versus gray and then the metrics, monitoring, and timeline for the ongoing watershed monitoring. This seems to be somewhat of a stacked approach with avoided emission and then water quality so two sets of MRV reporting - maybe this could be organized in a way to better reflect that and a note about weighing to two sets of metrics together - if there is less green build with higher impact or more green build needed?	Concur, please see revised section entitled, "Credit Verification and Release Schedule" which now clearly identifies and differentiates between monitoring for the project choice (additionality), the deployment and success of the green infrastructure, and water quality, and tie these to separate credit issuance milestones.	
5.1 This comparison should demonstrate that the proposed project activity will	Gisel asked to add 'conservatively'	New sentence reads: "This comparison should conservatively demonstrate that the proposed	Passed

likely maintain or improve water quality in the watershed.		project activity will maintain or improve water quality in the watershed.”	
8.4 Modeling	Tica: The model would need to reflect current and well as predicted demands of water in the area - if there is development planned that will require a change from the need of water quality at the agricultural level to that of drinking water - this seems to be more and more common as rural areas are experiencing growth and should be in line with crediting terms for the area	The Clean Water Act regulates point-source dischargers. As populations grow and demands on water change, the obligations of the existing and future dischargers change. But prior obligations and mitigation work under this methodology are already “baked in” - we don’t require past permits to manage future obligations. Any future demands can be addressed as they come up and are devolved to the utilities.	
4. Calculating Net GHG Reduction	Building on this, this section is the cornerstone of the base credit, so a more explicit credit calculation section would be helpful.	Gone through and addressed. 1. I added in a new section based on the comment 2. I have stripped out the economic evaluation. This does not appear to be relevant to the carbon accounting methodology (4.1.8 is the new section)	Passed
8.4 Modeling	Gisel: Is this methodology supposed to be implemented only in the US? I think Ive not seen that explicit... maybe otherwise there could be some citations added to NRCS or USDA models and leave it open to	Concur. This section does not limit the project developer to the US.	Passed- Noted that there’s an error in the numbering of section 6 now. Please correct

	analogous calibrated models for other countries...		
8.3 Quantifying Water Quality Benefits	Gisel: should the target be specified here? whether is irrigation quality level, or water consumption or reducing risk of eutrophication of wetlands downstream... I guess there might be different benchmarks / threshold levels to achieve	Our intent is for this methodology to be broadly applicable, and there's clearly a huge range of local targets esp when considering outside of US. So benchmarks will likely be very different globally	Passed- same as above, please check on the numbering of the sections
2.2. Temporal Boundaries	<p>Tica: It seems like there exists in this project two timelines/metrics - one for the build of the green infrastructure where metrics would be set against some sort of comparison between choosing green vs grey. The second is the continued success of the project which uses a separate set of metrics</p> <p>And:</p> <p>This is confusing to me. I can see how the crediting term can be based on the expected life of the treatment system, but I don't see why that means credits will be ex-ante-based. Why wouldn't credit generation be ex-post based on MRV? If you're forecasting business-as-usual emissions and comparing those data against actual measurements related</p>	Concur, please see revised section entitled, "Credit Verification and Release Schedule" which now clearly identifies and differentiates between monitoring for the project choice (additionality), the deployment and success of the green infrastructure, and water quality, and tie these to separate credit issuance milestones.	

	to emissions, I think that would still be considered an ex-post credit. I expect that ex-ante credits would be less attractive to buyers.		
3.0 Additionality	<p>Gisel: I think here you should adopt a clear definition. For example the definition that South Pole adopted goes: "Additionality means that the reductions in emissions achieved by the project must be "above business as usual". That means they would not have happened unless the project was implemented. " -which is different to the Financial additionality that for instance Sylvera adopted: "A carbon project is additional if the emissions reductions or removals would not have occurred without revenue from the sale of carbon credits. "</p> <p>This definition along with a clear definition of the baseline type should be included here.</p> <p>Baselines can be for instance static or dynamic, i.e based on one initial measurement on the same site or on comparable sites with business as usual along the crediting term. Based on modeling or in situ sampling...</p> <p>I think a mention to the baseline type and a clear definition of the</p>	Concur, revised, "Therefore, under this methodology additionality is sufficiently established when the water entity attests in writing that the anticipated carbon revenue enables green infrastructure water quality solutions that a.) enable pre-permit action, and/or b.) provides a necessary performance risk-reduction incentive, and/or c.) generate additional demonstrated benefits to existing programs."	Passed

	additionality you adopt must be included here.		
5. List of practices	Gisel: I suggest adding "and natural water courses restoration" At least over here the channeling of natural watercourses is an issue. Meanders used to slow water flow velocity, increment water holding capacity, allow for natural nutrient excess filtering processes, etc... not to mention vegetation communities and biodiversity in general that are lost when transforming the natural meanders into straight -shorter watercourses.	Added	Passed
7. The Project Proponent should develop a long-term maintenance plan	Ned asked if this could be a requirement	‘Should’ changed to ‘must’	Passed
8.3.3. The water quality model should be used to estimate the water quality benefits of the green infrastructure project.	Gisel requested addition of ‘conservatively’ before the word ‘estimate’	Added	Passed
Credit Class 2.2 Secondary Indicators	Tica: add in the word co-benefits here	added	Passed
Credit class 3.3 Land ownership type	Tica: change to "This credit class accepts projects which can properly demonstrate land ownership or	Changed	Passed

	landowner approval with adequate documentation."		
3.3 Land Ownership Type	<p>Tica: Add in Land Tenure: Land tenure is a legal term representing rights and interests in project lands.</p> <ol style="list-style-type: none"> 1. Project Proponent shall own, have control over, or document control over GHG sources/sinks from which removals originate. 2. Project Proponent shall provide documentation and/or attestation of land tenure. 3. In the case of leased/rented land, the landowner shall agree to all contractual obligations taken by the Project Proponent, and the Project proponent shall provide documentation and/or attestation of title agreement to credits. 4. Regen Registry may require a legal review by an expert in local law. 	Added.	Passed
3.5 Crediting Term	Tica: Above, you note that "The crediting term is established based on the expected life of the avoided water treatment system"	Revised to match definition.	Passed
4.3 Project Plan	Tica: Add in - The Project Plan will define and evidence Project Area(s) Project Activity, Project Eligibility and Project Rules and Regulations. The	Added	Passed

	<p>Project Proponent shall fill out the Project Plan Template and submit for review by the Regen Registry. link to template - https://docs.google.com/document/d/1p_HN4Q5vUjp3hni04ILFGYuAUPoB60a9Tc-l6PObZOo/copy</p>		
5. GHG Removal and Emission Reduction Requirements	<p>Add more detail such as: Common additionality tests which form part of the framework of other voluntary carbon market codes have been considered in the context of this project, as follows:</p> <ol style="list-style-type: none"> 1. Legally required practices are not accepted. 2. MRV demonstrates carbon storage above business as usual. 3. There is a reasonable expectation for carbon dioxide drawdown from project activity. 4. Credits are only issued for carbon removed from the atmosphere and quantified through this approved methodology after the establishment of the baseline 	Please see our revised Additionality Definition in the methodology document. Need further advice on what should be in the Credit Class doc versus the Methodology.	
4 - Evaluate the feasibility of implementing each alternative, considering factors such as land availability, regulatory	<p>Tica: maybe community impact is a cleaner metric - jobs for people to build the infrastructure - remove old infrastructure - skills developed - greater environmental health</p>	<p>Since these are typically regulated entities owned or managed by municipalities, there will almost always be a formal process that ultimately includes approval by elected officials. We suggest "community support" can capture this without limiting project proponents in</p>	Passed

requirements, and community support.		circumstances where formal government approval isn't required.	
9.9 General references	should some modeling approaches be referenced as well? like the NRCS curve number, and related tools to model through GIS like SWAT (I might be outdated here, those were the ones more widely used when I was working it 10 years ago)	These modeling tools are reflected in section 1.3 normative references, perhaps they should all be to one place or another together?	
Verification	Verification should be in the credit class	Migrated	Passed
4. Project Rules and Regulations	curious if you have a good definition of nature based to share, and what 's the difference here. Wouldn't green infrastructure considered nature based? Ikeep struggling to find a good definition to better understand if the remediation process must be natural or just the resource, in order to consider it a nature based solution	We have also wondered this - some of the project types defined in the methodology might include real infrastructure, like pipes or fences, but they are ecologically restorative.	Passed
2.2. Temporal Boundaries	Tica: agree that given ex-ante and that within 30 years it is likely that another upgrade would happen which would reset the crediting term so this should be shortened	Revised to: The minimum number of monitoring rounds is established in the Credit Verification and Release Schedule in the associated Credit Class document.	Passed

		The end date of the Crediting term will correspond to the last milestone in the Credit Verification and Release Schedule in the associated Credit Class document.	
6. Co-Benefits	<p>Tica: add in secondary indicators if you use this term in the methodology as well - or choose to use one or the other just be consistent</p> <p>should community health be an indicator here?</p>	<p>Corrected to co-benefits everywhere</p> <p>Added community health</p>	Passed
Credit Class Definitions	Tica: This is not a definitive list - needs to be indicated as such	Revised, "Example registries include"	Passed