

Stormwater Credit Think Tank

**Stormwater Credit Basic Principles &
Conceptual Model
White Paper**

April 2024

Overview and Background of Stormwater Credit Concept

Stormwater credits offer an alternative to implementation of onsite structural stormwater systems to meet compliance with stormwater permit requirements. The basic concept of stormwater credits is that credits are generated through the capture of stormwater at facilities, structural stormwater systems, intended to generate stormwater credits, known as Credit Generators or Credit Generator Facilities and are used by stormwater dischargers instead of implementing onsite structural stormwater systems, Credit Users. Essential to the stormwater credit concept is the establishment of a stormwater credit program that provides the parameters of eligibility for credit generation and use, the regulatory structure that permits the generation and use of credits, and the details of how a credit program functions.

This white paper provides information about the basic principles and a conceptual model for stormwater credits and serves as a foundation for understanding stormwater credits, however there are many options and decision points that need to be considered in the development of stormwater credit programs. This white paper explores the key options and decisions points about stormwater credit programs but is not exhaustive. The target audience for this white paper are those interested in stormwater credit programs including State Water Resources Control Board and Regional Water Quality Control Board staff, municipal decision makers, and potentially eligible dischargers. Potentially eligible dischargers include MS4 permittees, industrial stormwater permittees, transportation stormwater permittees (e.g. Caltrans), commercial and institutional stormwater permittees (e.g. CII permittees). Included in **Appendix A** is the Stormwater Credit Trading Terminology also developed by the Stormwater Credit Think Tank.

The following table provides a summary of approved stormwater credit programs with more to be identified in the future.

Table 1: Approved Stormwater Credit Programs

Program	Responsible Party	Link
City of Anaheim Stormwater Credit Program	City of Anaheim	https://www.anaheim.net/6470/Stormwater-Credits
Contra Costa County Regional Alternative Compliance System	Contra Costa County	https://www.sanpabloca.gov/2685/Regional-Alternative-Compliance
Lake Tahoe Lake Clarity Crediting Program	Counties in CA and NV, City of S. Lake Tahoe, CalTrans, NDOT	https://clarity.laketahoeinfo.org/Home/UrbanJurisdictions https://clarity.laketahoeinfo.org/Results/Detail/UrbanUplands
Nutrient Offset Program	City of Santa Rosa	https://www.srcity.org/1124/Nutrient-Offset-Program
District of Columbia Stormwater Retention Credit Trading Program	District of Columbia	https://doee.dc.gov/src
Grand Rapids Stormwater Credit Trading Program	City of Grand Rapids, MI	https://www.grandrapidsmi.gov/Government/Departments/Development-Center/Stormwater-Credit-Trading-Program

Why is the Stormwater Credit concept important/why develop a program?

Stormwater credit programs (SCPs) offer numerous potential benefits, including the following:

- **Funding** – SCPs provide a funding source for stormwater capture projects. Obtaining funding for stormwater capture projects at any scale is challenging and SCPs can help to provide the revenue or reimburse the costs associated with implementing a stormwater capture project including both the capital costs and the ongoing operation and maintenance costs.
- **Expedited Water Quality and Watershed Improvement** - SCPs accelerate water quality and watershed improvement in comparison to regulatory driven distributed on-site structural stormwater systems due primarily to the time. It may take several decades up to hundreds of years for existing development within a watershed to redevelop and integrate on-site structural stormwater systems for compliance with post-construction requirements. SCPs speed up that timetable through incentivizing implementation of regional stormwater capture projects or other types of projects that capture stormwater (e.g., green street projects), which will provide expedited improvement related to both stormwater quality and hydrologic functions in a watershed. In addition, this will help to reduce existing water quality impairments and help to achieve TMDL and watershed management plan goals where they exist.
- **Provides Water Supply** – SCPs promote capture of stormwater as a resource and can augment local water supplies through stormwater capture projects that can recharge groundwater, offset landscape use of potable water, provide local stormwater capture and use, or provide stormwater to water districts or sanitation districts to augment their water source portfolio.
- **Improves BMP Effectiveness** – SCPs improve the effectiveness and efficiency of stormwater capture by replacing on-site structural stormwater systems with more efficiently managed stormwater capture systems on a larger scale. This can provide efficiencies including more oversight and reliability related to design, construction, and operation and maintenance of structural stormwater systems and help to ensure that systems are designed, installed, and maintained properly providing better pollutant removal an overall function and effectiveness than distributed on-site structural stormwater systems.
- **Reduces Burden of On-site Structural Stormwater Systems** – Structural stormwater systems require significant effort for their planning, design, construction, and operation and maintenance. This burden is both realized by the stormwater discharger or land/business owner implementing the on-site structural stormwater system as well as the regulatory oversight entity such as a municipality through the plan check and inspection processes. SCPs help to reduce this burden by providing the stormwater discharger an option to eliminate the process of implementation of an on-site structural stormwater system which also eliminates the burden on the regulatory oversight entity such as a municipality to plan check, inspect, and track on-site structural stormwater systems in their jurisdiction which is becoming an ever-growing responsibility.
- **Land Use Flexibility** – SCPs provide stormwater dischargers, the land/business owner, that would implement the on-site structural stormwater system, flexibility with the use of their land. On-site structural stormwater systems in most cases are not the most efficient or profitable use of land and SCPs provide an option to stormwater dischargers, the land/business owner, to use their land more efficiently and effectively that aligns with their primary intended land use.
- **Multiple Benefit Stormwater Capture** – Integration of multiple benefits to any public

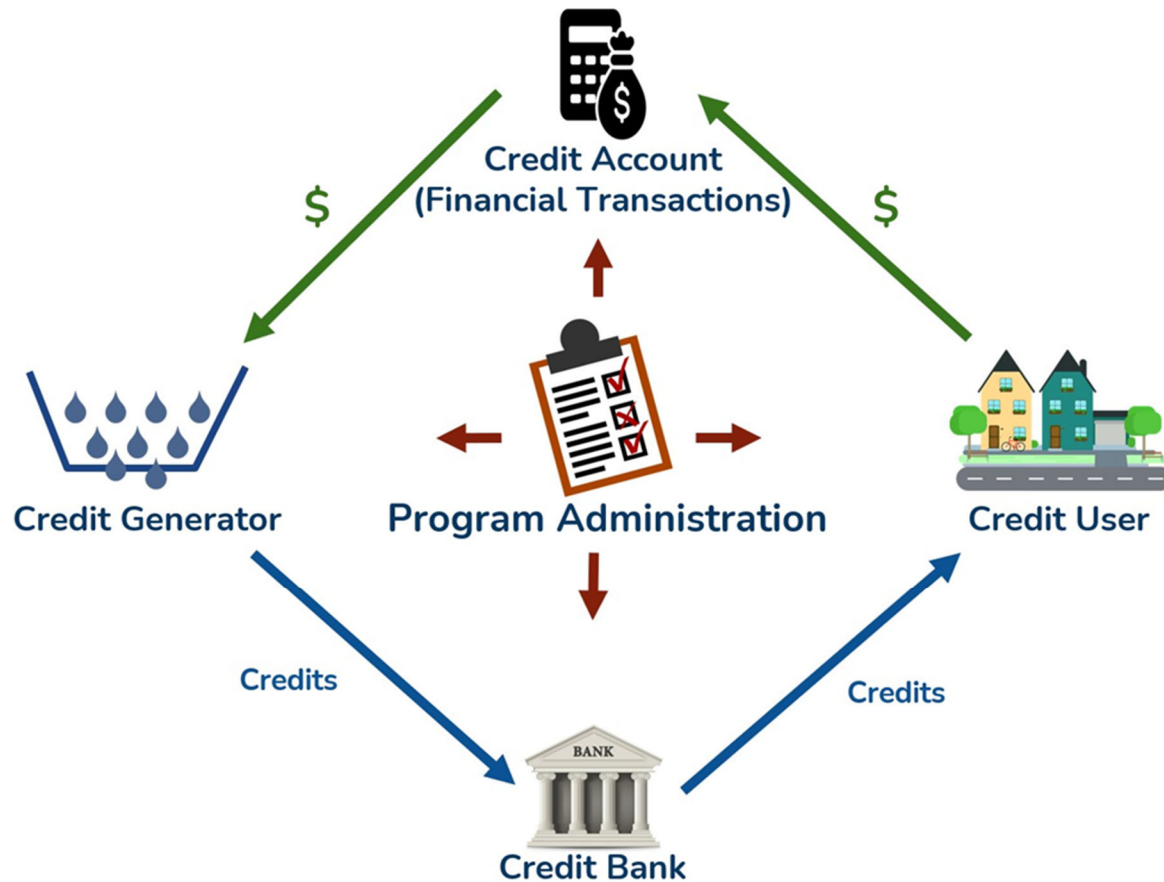
infrastructure project is becoming standard practice to provide the public with community benefits for projects constructed with their tax dollars. SCPs provide an opportunity and financial resources to implement stormwater capture projects, including green stormwater infrastructure projects, that can deliver multiple benefits which can address community needs and provide numerous community benefits. This may include implementation of stormwater parks or retrofit of parks with stormwater capture systems that can provide a recreational and educational element to stormwater capture in a park setting. Other multiple benefits that can be achieved through SCPs and associated stormwater capture projects include climate resilience, urban greening and heat island reduction, flood control, water supply, passive recreation, public education, and help to solve environmental justice issues.

- **Public Private Partnerships** – SCPs provide an opportunity to reduce the administration burden on municipalities and other public stormwater dischargers associated with implementing stormwater capture projects. With the funding revenue that SCPs provide, the private sector can be incentivized to engage in the planning, design, construction, and operation and maintenance of structural stormwater systems for profit. This approach could provide a significant alternative to public implementation of regional structural stormwater systems reducing the burden on municipalities and other public stormwater dischargers.
- **Economic Revitalization** – SCPs and associated multi-benefit stormwater capture projects can also help to provide economic revitalization. Implementation of stormwater capture projects such as green stormwater infrastructure have been proven to be a catalyst for economic improvement and investment in redevelopment in some areas. The concept of green gentrification, however, must be considered to guard against existing residents and business owners being priced out of their areas due to green stormwater infrastructure resulting in increasing land values and rent.
- **Improved Regulatory Relationships** – SCPs have the potential to improve relationships between stormwater regulators and permittees as well as with non-governmental organizations (NGOs). Many of the goals and benefits of SCPs align closely with the goals of stormwater regulators, permittees, and NGOs focused on the environment namely expedited water quality and watershed improvement. The process of permittees working together with stormwater regulators and NGOs on a program with common goals may have the effect of improved relationships resulting in working more efficiently together in the future on stormwater and other programs. Early coordination with regulators and NGOs is essential to a stormwater credit program's success.

Basic Elements and Principles

Although SCPs can have many different options there is a basic concept that is consistent with most SCPs. The figure below provides a conceptual model for SCPs and is described below.

Figure 1: Stormwater Credit Program Conceptual Model



Credit Generation Facilities are stormwater capture facilities or structural stormwater systems intended to generate stormwater credits. Once credits are generated the credits are then stored in a Credit Bank for future use. Credits can be purchased by eligible Credit Users instead of implementing onsite structural stormwater systems to meet requirements of a stormwater permit. Credit Users purchase credits available in the bank based on their needs and the funds used for the purchase of the credits are deposited into a Credit Account that houses funds from the sale of credits. Funds in the Credit Account are then used to reimburse the Credit Generators.

Central to a stormwater credit program is program administration, which oversees credit generation, credit use, the credit bank, and the credit account as well as all the details and protocols associated with the activities for generation, use, and tracking of credits. SCPs have many program administration options, including what entities can generate and use credits which can include the following transaction types for credit generators and credit users; public entity to public entity, public entity to private entity, private entity to private entity, and private entity to public entity. Eligibility for credit generation and credit use identified in a SCP will determine who can be a credit generator and who can be a credit user.

Considerations

When considering the development of SCPs there are several elements that need to be evaluated. The following is a basic list of considerations that should be evaluated when considering development of an SCP, but this list is not exhaustive and there may be other site-specific considerations not included here.

- *Appropriate Permit Language* – Understanding if the stormwater permit your jurisdiction is subject to has language that would allow an SCP is a critical first step in the evaluation of development of an SCP. Evaluating the permit language should be carried out to understand if an SCP would be allowed and if so, what constraints the language would put on an SCP.
- *Duration for Program Development and Approval* – The development of SCPs can take a significant amount of time, in some cases several years, due to their current complexity. Additionally, review and approval of SCPs by regulatory agencies may take a significant amount of time based on the familiarity of the regulatory agency about SCPs and the complexity of the SCP seeking approval. The purpose however of the Stormwater Credit Think Tank (SCTT) and this white paper is to help shorten the time needed for both the development and approval of SCPs.
- *Program Need* – The need for an SCP for a specific jurisdiction or group of jurisdictions needs to be evaluated. Due to the complexity and time it takes to develop SCPs specific needs should be identified prior to the development of an SCP. These needs may include lack of funding for stormwater capture projects or requests for flexibility of meeting post-construction requirements from the development community or other stormwater dischargers. The needs identified for an SCP should be weighed against the cost and effort to develop an SCP to identify if development of an SCP is a viable option for a jurisdiction or group of jurisdictions.
- *SCP Scope and Size* – SCPs can vary significantly in scope and complexity and jurisdictions should evaluate the options that will affect the scope and size of the program, which is directly related to who is eligible to participate in the program. Evaluation of the eligibility requirements for credit generators and credit users will help to determine the scope and size of the program. Limiting eligibility will help to reduce participation in the SCP and result in a smaller and likely a less complex program, however this can reduce the potential benefits of the program. Having more broad eligibility requirements for credit generators and credit users will increase the scope and size of the program as well as its complexity but could result in more benefits and accelerated realization of program benefits.
- *Program Feasibility* - A program feasibility analysis should be considered prior to the development of an SCP. The feasibility of program will in large part be determined by the potential credit users in the jurisdiction, group of jurisdictions, or the area in which the SCP would operate. The feasibility analysis should consider outreach to potential credit users to understand the willingness to participate in program and purchase credits. Additionally, if the scope of the SCP envisions more flexible eligibility for credit generation (e.g. public and private entities) analysis of potential credit generators in the area the SCP would operate is warranted.
- *Support for the Program* – Gaining support for an SCP is a critical step in its process of development and approval. Identifying who are the key participants and organizations in the proposed area of the SCP where support will be needed and identifying if obtaining their support, if possible, is a critical step in evaluating if developing and SCP makes sense.
- *Program Administrator* – Effective program administration of SCPs is essential to their success. An evaluation of program administration options is needed including identification of who will

administer the program, understanding if the jurisdiction has the capacity to administer the program or if administrative duties fall to a third party or require a special entity or district be set up. Understanding how administration of the SCP will be funded is also critical, whether from a portion of the cost of credits that is allocated to program administration or another source of funding. Understanding all of the potential tasks of administration of an SCP is also important, which is discussed further below under key elements of SCPs.

Key Elements and Decision Points

There are key elements in SCPs and within those key elements there are options or decision points that need to be evaluated based on the type of SCP that is desired. The decision points about the key elements of an SCP should be evaluated either before development of the program or in the early stages of developing an SCP. The following is a list of key elements and associated decision points for SCPs that provide context for the key decision points. Included in Appendix A is the Stormwater Credit Trading Terminology which presents the definitions related to SCPs developed by the Stormwater Credit Think Tank.

- *Credit Definition* - Defining a stormwater credit is straightforward but there are options. The most common definition for a stormwater credit is to equate it to a volume of water such as 1 credit = 1 cubic foot of water captured.
- *Credit Trading Area* – The area in which credits can be generated and used is often identified as the “credit trading area.” A key decision point is the scale of the credit trading area. Many SCPs use medium scale watersheds as the trading area; municipal boundaries may be another option. Regulatory agencies will be most interested in ensuring that water quality is protected and improving throughout the trading area. There may be permit language that limits the extent of the area where credits can be used in relation to where credits are generated. Regulatory agencies should realize that limiting the scale of trades limits the success and growth of SCPs and the ability to implement more credit generation facilities and therefore slows the improvement of water quality and watershed health. Both credit program administrators and credit generators would likely have a desire for the largest credit trading area possible as larger credit trading areas means more potential credit users, the use/sale of credits more quickly, and more credit sales is SCP sustainability. Larger credit trading areas results in a quicker return on investment (ROI) for credit generators. A quicker ROI for credit generators and program administrators may mean the ability to construct more credit generation facilities more rapidly and provide improved water quality and watershed health quicker.
- *Credit Generation* - Credit Generation Facilities are stormwater management facilities constructed and operated to generate Credits in conformance with the requirements of an SCP. They include projects that capture stormwater from existing discharge areas and can be stormwater capture systems that are regional in size or distributed, smaller scale projects. Credit Generators are the entity that provides Credits for sale in an SCP. Responsibilities of Credit Generators include project design and documentation of capture capacity, project construction, operations and maintenance, and inspections and reporting of the credit generation facility. A key decision point for SCPs is identifying who should be eligible to generate credits. This could include public agencies, private entities, or hybrid organizations. Most of the conversation about SCPs has focused on public generation, but private entities and even public private partnerships (PPPs) can also generate credits. For private and PPP credit generators there may need to be a higher level of scrutiny regarding verification of construction and ongoing operation and maintenance. Enabling private generation creates multi-benefit stormwater

capture opportunities where there is no public land or opportunities. Allowing private and PPP credit generators has the potential to utilize the power of the free market to provide improved water quality and watershed health. With private generation an easement or enforceable maintenance contract may be needed to verify operation and maintenance by program administration.

- *Credit Use/Credit Trade* – Credit users purchase credits instead of implementing on-site structural stormwater capture systems to meet compliance with a stormwater permit. Credit users are responsible for determining the stormwater control obligations for their project or facility, apply for the purchase of credits, purchase credits, document use of credits to overseeing jurisdiction, and potentially pay an ongoing operation and maintenance fee depending on how a SCP is set up. Credit users are motivated by streamlined discharger compliance if credits are available and more flexibility in the use of their land for more profitable activities than onsite structural stormwater systems. A key decision point for SCPs is identifying who should be eligible to use credits. This may be limited by authorization in the MS4 permit or other stormwater permits such as the Industrial General Permit. Many of the options include new development projects, re-development projects, industrial dischargers, transportation dischargers, and commercial dischargers. Credit use can also be constrained by a feasibility analysis requirement by potential credit users for the ability to implement on-site structural stormwater capture systems. The requirement of a feasibility analysis will limit the number of credit users and in some cases having a regional credit generator may have other benefits such as groundwater replenishment in an area where it is desired and can provide a water supply in the future. Some believe that greenfield development should implement on-site stormwater capture structural systems onsite as there is the space and opportunity to implement these systems and implementing offsite systems in developed areas and not on-site for just creates new pollution issues in the greenfield development areas. In comparison to redevelopment in existing developed areas where in many cases there are no on-site structural systems currently in place, implementing offsite systems and not on-site does not create new pollution issues, and helps to address existing development. Regulatory agencies will want to ensure that the types of discharges where credit use is authorized are appropriate and do not cause water quality issues.
- *Credit Availability and Timing* - The availability and timing for the use of credits is a key decision point for an SCP. It is critical for SCPs to identify whether credits can be sold and released before the credit generators are built and operating. In most SCPs credits are not generated and available for sale until the credit generator is completed and verified, however it may be difficult, especially in the early years of an SCP, to find the capital to construct credit generation facilities. Some programs made existing, non-regulatory projects eligible to generate credits during a limited initial stage. Stormwater permit language will often dictate the availability and timing for the use of credits and some permits allow for purchase of credits prior to completion of credit generation facilities, often known as fee-in-lieu programs. If purchase of credits is allowed prior to completion of credit generation facilities regulatory agencies will be most concerned about allowing too much time between purchase of a credit and completion of the credit generation facility to be protective of water quality. For SCPs having the ability to purchase credits before credit generators are complete may create too much complexity in the tracking of credits. In some SCPs credits expire and so this presents another key decision point about if credits expire or if they are permanent. Expiration of credits would most certainly create more complexity for an SCP as it would require renewal of credits and tracking of credit expiration.

- *Credit Adjustments and Ratios* – SCPs typically integrate credit adjustments and ratios to account for uncertainties associated with differing land uses between credit generators and credit users, providing a net benefit to water quality and watershed health, existing structural stormwater systems in the drainage area of a credit generator, operation and maintenance of credit generation facilities, program resiliency, and other adjustments. Ultimately SCPs should have a positive effect on water quality and watershed health so removing a portion of credits for purchase will help to achieve this. Additionally, retention of credits as a safety factor and to build program resiliency for potential credit loss from a credit generator due to operation and maintenance issues or unforeseen events such as natural disaster that may cause catastrophic failure or loss of a credit generator is also an approach that has been used. Differentiation in land uses of Credit Generator Facility drainage areas and Credit Users needs to be accounted for and so some SCPs have developed land use and pollutant loading analysis and credit ratios that are applied to credit users for the purchase of credits to account for these differences in land use. Both existing structural stormwater systems in the drainage area of a credit generator and the potential for future structural stormwater systems in the drainage area of a credit generator also need to be accounted for with credit adjustments. Other credit adjustments may also be needed such as adjustments for different funding sources as grant funding agencies may include limitations with respect to the use of grant funds used for construction of credit generators, for permit compliance purposes.
- *Credit Pricing* – The pricing of credits can be complex and needs to consider a variety of factors. A key decision point includes the options available. Some options include a fixed price approach which would be an amalgamation of credit generator costs, and then the development of a fixed price by the program administrator. A free-market approach could include 1) a price set by the credit generator and then fixed for their facility based on their costs and potentially profit, and not set by the program administrator or 2) negotiation of price between buyer and seller, however in this scenario there would likely need to be a step to ensure the program administrator is aware of the transaction. A free-market approach may encourage more cost-effective projects due to competition. Another key decision point is whether the credit price should reflect the operation and maintenance costs incurred by credit generators in perpetuity or just the capital costs. If the latter, then an ongoing operation and maintenance fee assessed to credit users may be necessary.
- *Program Administration* – Effective program administration is critical to a successful SCP. The following are some of the primary responsibilities of an SCP program administrator, but this is not an exhaustive list. An SCP program administrator creates crediting framework for credit purchases, reviews and approves credit generator and credit user documents and applications, calculates credit adjustments, tracks credits for credit program trading areas and manages the credit bank, manages the credit account and the financial transactions of the SCP, advertising of credits, reports on program status to regulatory agency, inspects and verifies credit generator facilities, and completes program audits. Some considerations for program administration include jurisdictional issues if an SCP crosses jurisdictions, liability issues with the SCP and credit generators, development of numerous protocols and processes in order for an SCP to function, and long-term commitments to management of an SCP.

Resources

This list of resources was created as part of the development process for the City of Anaheim's Stormwater Credit Program. This list is not meant to be inclusive of all documents publicly available on the subject of water quality or stormwater credit programs but represents a compilation of information that provides useful background information on the subject of water quality and stormwater credits.

- Building a Water Quality Trading Program: Options and Considerations. June 2015. National Network on Water Quality Trading.
<https://willamettepartnership.org/wp-content/uploads/2015/06/BuildingaWQTProgram-NNWQT.pdf>
- Water Quality Equivalency Guidance Document for Participation in Jurisdictional Alternative Compliance Programs under California RWQCB, San Diego Region MS4 Permit. Copermittees. May 2018.
<http://www.projectcleanwater.org/download/2018-wqe/>
- Model MS4 Alternative Compliance Program Benefit Cost Analysis for Orange County, California. December 2016. Haimann Engineering, Inc, Construction Industry Coalition on Water Quality.
- Storm Water Retention Credit Program. Government of the District of Columbia, Department of Energy and Environmental.
<https://doee.dc.gov/src>
- "Stormwater Credit Trading Program Architecture" December 5, 2017. Vaikko Allen, Derek Berg, and Jacob Dorman.
<https://www.stormh2o.com/home/article/13032160/stormwater-credit-trading-program-architecture>
- Water Quality Program Credits and Incentives Manual. August 2016. City of Chattanooga
http://www.chattanooga.gov/images/citymedia/publicworks/Credit_Incentive_Manual_2016-08-12.pdf
- Louisiana Water Quality Trading Guidance. October 2019. Louisiana Department of Environmental Quality.
https://deq.louisiana.gov/assets/docs/Water/LouisianaWaterQualityTradingGuidance_DRAFT_10182019.pdf
- Guidance for Developing an Off-site Stormwater Compliance Program for Redevelopment Projects in Massachusetts. June 2018. Center for Watershed Protection, Inc.
<https://www3.epa.gov/region1/npdes/stormwater/ma/ma-off-site-mitigation-guidance-manual.pdf>
- How To: Stormwater Credit Trading Programs, February 2018. Natural Resources Defense Council
<https://www.nrdc.org/sites/default/files/stormwater-credit-trading-programs-ib.pdf>
- Water Quality Trading (Internal Management Directive). March 2016. State of Oregon Department of Environmental Quality.
<https://www.oregon.gov/deq/Filtered%20Library/WQTradingIMD.pdf>
- USEPA Memorandum: Updating the Environmental Protection Agency's Water Quality Trading Policy to Promote Market-Based Mechanisms for Improving Water Quality. February 2019. USEPA.
<https://www.epa.gov/sites/production/files/2019-02/documents/trading-policy-memo-2019.pdf>

- Stormwater Management Service Charge, Credits and Appeals manual. September 2019. Philadelphia Water Department.
https://www.phila.gov/water/PDF/scaa_manual.pdf
- Establishing A Stormwater Volume Credit Trading Program, A Practical Guide for Stormwater Practitioners. September 2019.
https://s3.amazonaws.com/american-rivers-website/wp-content/uploads/2019/09/25124647/AR_StormwaterVolumeCreditTrading_Final.pdf
- Stormwater In-Lieu Fee and Credit Banking and Trading Feasibility Report (Draft). March 2017. Albany Pool Communities and the Capital District Regional Planning Commission
<http://cdrpc.org/wp-content/uploads/2017/12/Stormwater-ILF-and-Credit-Banking-Feasibility-Report.pdf>
- A Water Quality Trading How To Manual. Sep 2013. Wisconsin Department of Natural Resources
<https://dnr.wi.gov/topic/wastewater/WaterQualityTrading.html>
- A Watershed Approach to Mitigating Stormwater Impacts. 2016. National Cooperative Highway Research Program
<https://www.nap.edu/catalog/24753/a-watershed-approach-to-mitigating-stormwater-impacts>

Appendix A

Stormwater Credit Trading Terminology

Based, in part, on the following source documents:

Building a Water Quality Trading Program: Options and Considerations - National Network on Water Quality Trading. 2015

The Water Quality Trading Tool Kit - Willamette Partnership. 2016

Guidance for Developing an Off-site Stormwater Compliance Program for Redevelopment Projects in Massachusetts. Center for Watershed Protection, Inc. 2018

Stormwater Credit Program, City of Anaheim. 2023

Virginia Citizen's Guide to Environmental Credit Trading Programs: An Overview. Virginia Cooperative Extension. 2022

Regional Alternative Compliance System Summary Report. City of San Pablo. 2023

Term	Definition
Credit (Also referred to as a Stormwater Credit)	A measurement unit of equivalent pollutant discharge reduction established for a specified location, typically expressed as pollutant load over time, volume retained/treated, acres treated/restored, or other scientifically-defensible measures of equivalency. Units are often adjusted by Credit Retention and/or Credit Trading Ratio factors prior to use in stormwater credit trading programs.
Credit Account	The financial mechanism established to receive, hold, and disburse funds associated with the purchase of Credits.
Credit Bank (Also referred to as Credit Clearing House)	The system established to track available and purchased Credits.
Credit Generator (Also referred to as Credit Provider or Credit Seller)	Entity that provides Credits for sale in a Credit trading program.
Credit Generator Facility	Stormwater management facilities constructed and operated to generate Credits in conformance with the requirements of a Credit trading program.
Credit Generator Facility Verification	The role of the Credit Program Administrator to conduct document reviews and physical inspections of Credit Generator Facilities for proper implementation, operation, and maintenance to ensure adherence to the requirements of the Credit trading program.
Credit Price	The cost per Credit applied in a Credit Trade. The price may be based on the cost of design and construction

	of the Credit Generator Facility or independently set by the Credit Generator based on market conditions. Operations and maintenance costs may be included in the Credit Price or charged separately.
Credit Program Administrator	The entity responsible for the operation of a Credit trading program with responsibilities including defining credit calculation methodologies, protocols, and quality standards; reviewing and tracking Credit Generator Facilities; tracking available and purchased Credits; and reporting to overseeing regulatory agencies.
Credit Retention (Also referred to as Credit Reduction, Credit Adjustments, or Credit Reserve Pool)	A pool of Credits retained in the Credit Account to ensure against various forms of risk and uncertainty in the Credit trading program including unforeseen operational and performance issues at Credit Generator Facilities.
Credit Term	The period from the date a credit becomes usable as an offset to the date that the credit is no longer valid. In many cases, the credits may exist in perpetuity.
Credit Trade (Also referred to as a Credit Purchase or Credit Sale)	The transaction overseen by the Credit Program Administrator, using the Credit Bank and the Credit Account, to transfer Credits from a Credit Generator to a Credit User; transfer funds from a Credit User to a Credit Generator; and, if applicable, assess administrative fees.
Credit Trading Area	A geographic area within which Credits can be generated and purchased by other entities to meet water quality compliance requirements. Credit Trading Areas are typically determined ecologically based on hydrologically connected waters, but other factors may be considered.
Credit Trading Ratio	A ratio, determined by the Credit Program Administrator or overseeing regulatory agency, that requires Credit Users to purchase a specified amount of Credits that exceed stormwater discharge reduction requirements.
Credit User (Also referred to as Credit Buyer)	The regulated entity that purchases Credits generated by another entity to meet stormwater quality compliance requirements.