

Stormwater Credit Think Tank - First Year Accomplishments and Products

Chris Crompton - MBI

Dave Smith - Water Innovation Services

Daniel Apt - Olaunu



Session 12, October 23, 2024 – Funding Track

Short Survey



- What is your knowledge of offsite credit trading?
 - I know a lot
 - I know some
 - I know little

Presentation Overview



- Why Stormwater Credit Think Tank was formed
- Accomplishments of Think Tank:
 - Engaged over 50 stormwater and environmental professionals – 11 well attended meetings
 - Case studies - Anaheim, Grand Rapids, Contra Costa County, and Washington DC programs
 - Compilation of stormwater credit trading reference documents
 - **Development of a glossary of standardized credit trading terminology**
 - **Preparation of a Stormwater Credit Basic Principles and Conceptual Model White Paper**
 - **Preparation of a Roadmap of Future Actions to Build Stormwater Credit Trading Capacity in California**
- Next Steps

Why Stormwater Credit Think Tank Formed

- Established after February 9, 2023, STORMS Workshop – no group was working on credit trading
- Provides an ongoing forum to promote and develop offsite credit trading capacity in California
- Brings together regulators, permittees, building industry, NGOs, and consultants
 - CASQA attendees are welcome to participate

Key Terms - Credit

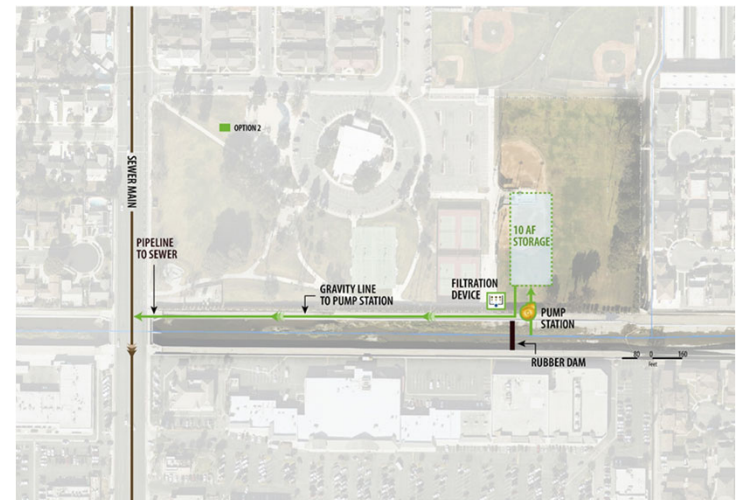


- Unit of measure for offsite stormwater credit trading program
 - Expressed as a unit of volume (typically in cubic feet) and is created by a Credit Generator Facility for use by Credit Users within the same watershed

Key Terms - Credit Generator



- Credit Generator – Entity that creates surplus credits by implementing an approved stormwater control measure
- Credit Generator Facility - Project that is constructed, operated, and verified for the purpose of generating credits
 - Examples:
 - Infiltration systems
 - Stormwater capture & use
 - Diversion to sanitary sewer (wet weather)
 - Bioretention/ green infrastructure
 - Porous pavement/smart streets



Murdy Park Sanitary Sewer Diversion Project Concept, HB

Key Terms - Credit User (Buyer)



Credit User

- The entity that purchases surplus credits, generated by another entity, to meet its own water quality compliance requirements
 - Examples:
 - MS4 permittees
 - Industrial General Permit permittees
 - Caltrans
 - Commercial, Industrial, and Institutional (CII) permittees
 - Priority development projects

Key Terms – Credit Program Administrator



Program
Administration

- The entity responsible for the operation and maintenance of an offsite Credit trading program
 - Responsibilities may include:
 - Defining credit calculation methodologies, protocols, and quality standards
 - Conducting project reviews, final verifications, ongoing O&M review, and audits
 - Reviewing credit generator/credit user documents/applications and Credit registrations
 - Managing financial transactions
 - Reporting on program status to permitting agency



Credit Bank



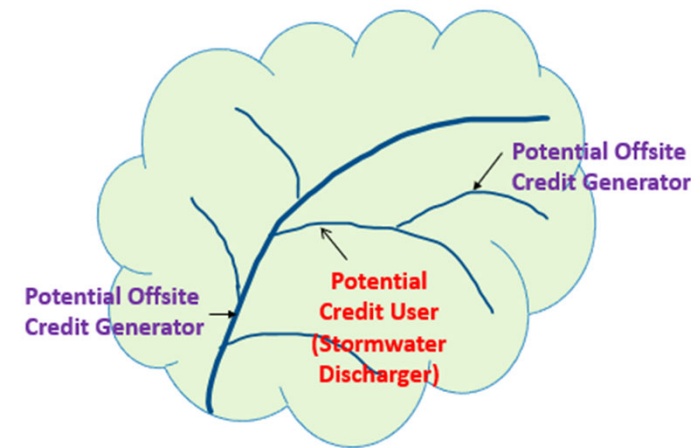
Credit Account



Inspection
& Audit

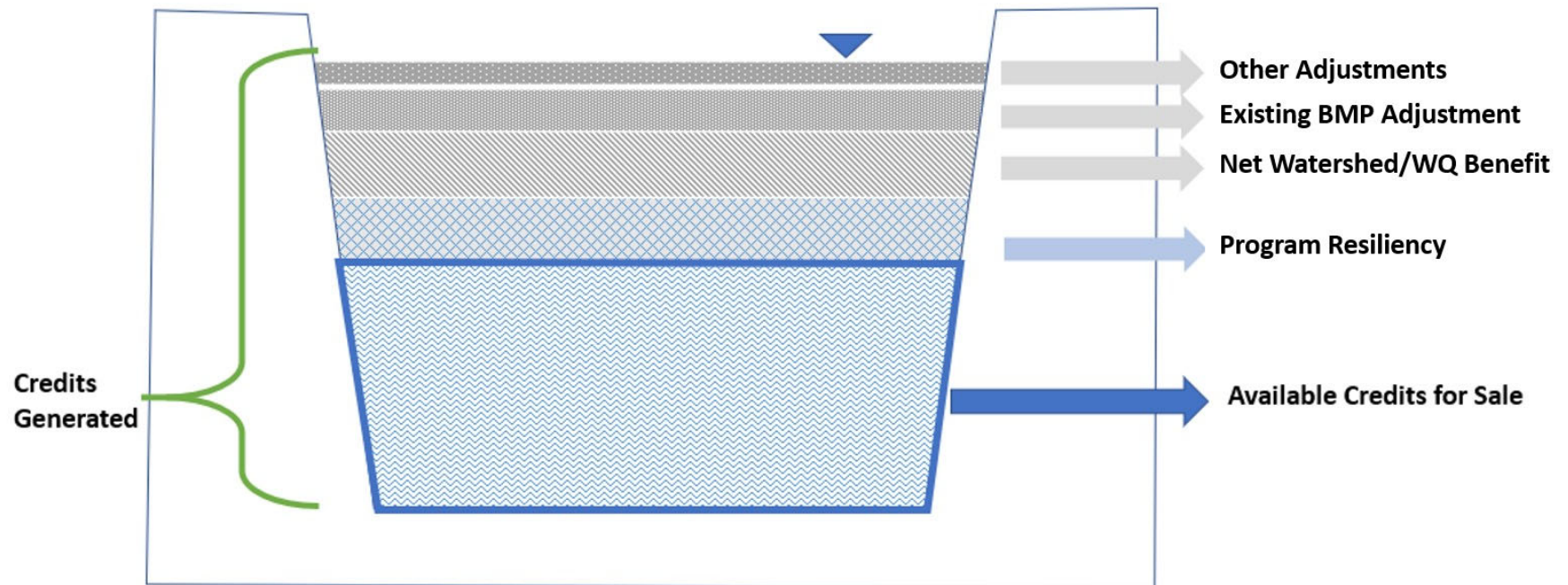
Key Terms – Credit Trading Area

- A geographic area within which credits can be bought and sold
 - May be defined ecologically where a pollution reduction in one part of a watershed can be linked to a water quality improvement at a point of compliance
 - May be limited to projects either upstream or downstream from Credit Users discharge location
 - Too small a trading area will result in too few Credits being available



Key Terms - Credit Retention/Adjustments/Ratios

- A numeric value used to adjust available credits for a seller or credit obligations of a buyer based on various forms of risk and uncertainty





Stormwater Credit Think Tank

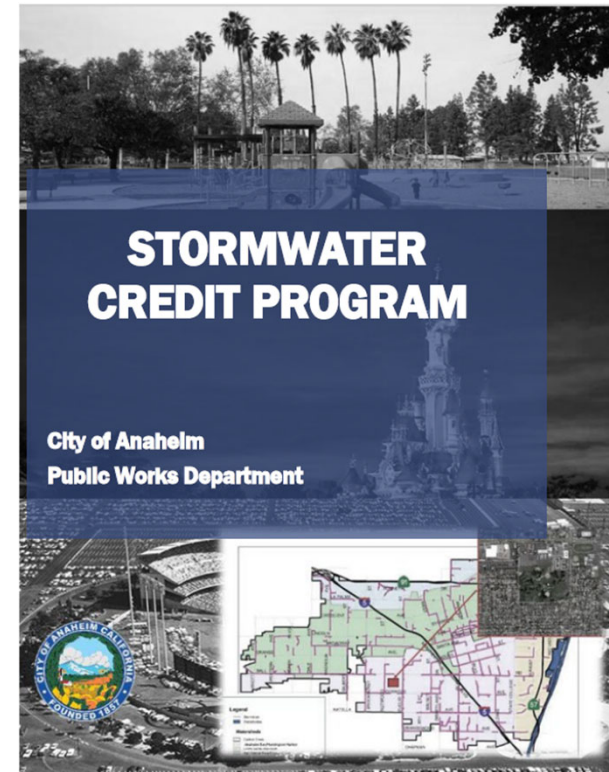
Stormwater Credit Basic Principles & Conceptual Model White Paper

April 2024

“...provides information about the basic principles and a conceptual model for stormwater credits and serves as a foundation for understanding stormwater credits”

Who has Developed an Offsite Credit Trading Program?

- City of Anaheim Stormwater Credit Program
- Contra Costa County Regional Alternative Compliance System
- Lake Tahoe Lake Clarity Crediting Program
- City of Santa Rosa Nutrient Offset Program
- District of Columbia Stormwater Retention Credit Trading Program
- Grand Rapids Stormwater Credit Trading Program



Why Develop a Stormwater Credit Program?

- Funding source for stormwater capture projects
- Expedites water quality and watershed improvement in existing urban areas
- Provides water supply
- Improves BMP effectiveness including more reliable long-term O&M of stormwater capture systems
- Reduces the burden on municipalities and private development related to onsite BMPs
- Provides credit users more flexible and cost-effective land development / redevelopment options
- Creates sustainable, integrated, and multi-benefit projects in more of the watershed – increased resilience
- Potential for Public Private Partnerships
- Potential for economic revitalization

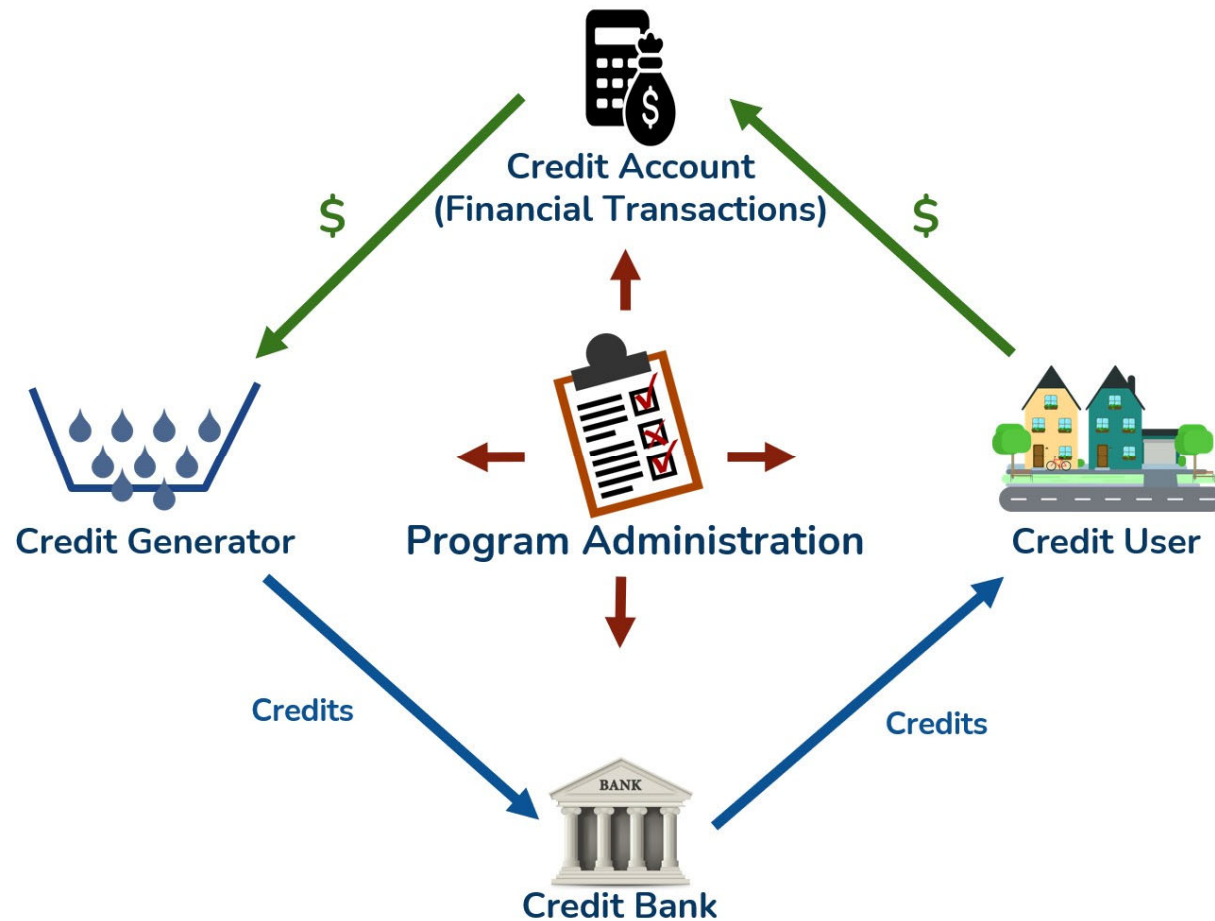
What is a Stormwater Credit Program?



- In its simplest form:
 - Credits generated by offsite stormwater capture projects
 - Credits purchased by stormwater dischargers instead of constructing onsite structural BMPs
 - Voluntary – an alternative compliance approach

More complex in practice

Stormwater Credit Program Conceptual Model



Considerations in Setting Up Stormwater Credit Program

General considerations:

- Does the MS4 permit support it?
- Is there a need?
- Feasibility analysis, are there potential credit users, credit generators?
 - How will credit generators and buyers be identified?
- Timeframe for program development and approval
- Is there support for the program from key participants and organizations?
- What is the scope and size of the program envisioned?
- Who will administer the program?
 - How will administration be funded?

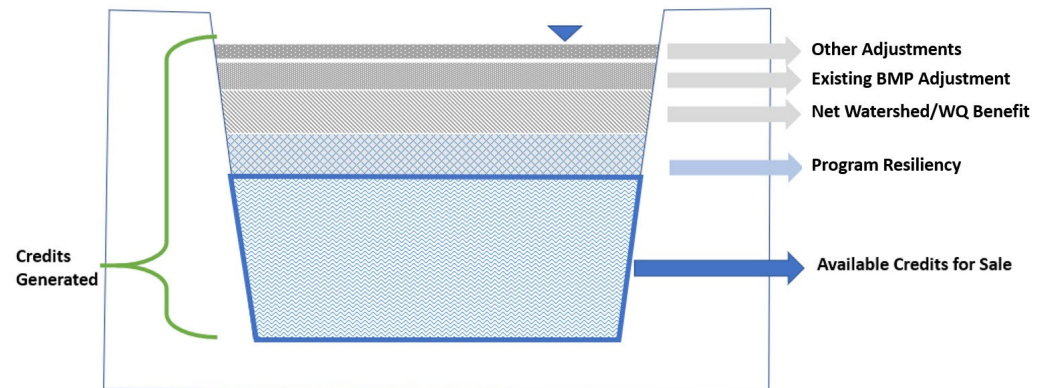
H. Post-Construction Treatment Control Credit Programs

This Order authorizes the Permittees to allow the transfer of design capture volume or flow credits to priority projects. These credits may be used by a priority project to satisfy requirements in this Order to treat the design capture volume or flow from the project and to address changes in hydrology according to section VIII.L. Credit programs using treatment control measures are subject to the following limitations:

Santa Ana Water Board Draft Permit Language

Key Elements and Decision Points for Stormwater Credit Programs

- Credit definition (i.e. credit = 1 cubic foot of water captured)
- Credit trading area
- Credit generation requirements
- Credit use/trade requirements
- Credit availability and timing
- Credit adjustments and ratios
- Credit pricing (i.e. fixed price / free market)
- Program administration





Stormwater Credit Think Tank

Building Stormwater Credit Trading Capacity in California A Roadmap of Future Actions

April 2024

“...development and implementation of stormwater credit trading programs are currently hampered by uncertainties about the core principles underpinning credit trading, the complexity of these approaches, variability in potential program approaches, limited communication among organizations interested in stormwater credit trading, local planning bandwidth constraints, and lack of clarity about how stormwater credit trading relates to permit requirements established by the Water Boards. Stormwater managers, except in isolated instances, lack the current capacity to efficiently address these challenges individually.”

Roadmap Goals



- Build statewide capability to advance stormwater credit trading implementation
- Establish basic principles and a conceptual model for stormwater credit trading including consistent terminology
- Ensure flexibility in program design is preserved and balanced by:
 - Establishing shared understanding of minimum program elements
 - Ensuring credit trading programs are accountable, transparent, and effective
- Provide guidance and educational/outreach materials
- Create and sustain an ongoing community of practice

Roadmap Audience



- Developers and other parties with stormwater management responsibilities
- State and Regional Board regulatory programs
- Environmental and environmental justice groups
- Key local and regional decisionmakers with roles in stormwater program leadership
- Interested members of the public, including community groups and watershed organizations
- Consultants, attorneys, and researchers involved in discussion/development of credit trading approaches

Proposed Roadmap Actions



- Develop outreach and educational materials
- Develop stormwater credit trading program design guidance
- Develop stormwater credit trading regulatory guidance
- Develop stormwater credit trading regulatory training
- Identify research and development needs
- Continue to maintain a stormwater credit trading community of practice

Estimated cost \$235,000 to \$330,000 over two years

Next Steps



- Seeking funding to implement the Roadmap:
 - Permittees
 - Development industry
 - Water Boards
 - Grants
 - Others
- Continue to maintain quarterly Think Tank meetings



Let the questions begin

hey! I GOT
A QUESTION

