

Program Improvement Executive Meeting Meeting Report

DATE	September 8, 2011
TIME	3:00 – 5:00
LOCATION	Lahontan Water Board – Main Conference Room
FACILITATOR(S)	Chad Praul
PARTICIPANT LIST	Decision makers: Dave Gaskin (NDEP), Harold Singer (Lahontan) Support team: Jason Kuchnicki & Kathy Sertic (NDEP), Bob Larsen & Doug Smith (Lahontan), Paul Nielsen (TRPA), Jack Landy (US EPA), Jeremy Sokulsky (EI)

MEETING OBJECTIVES

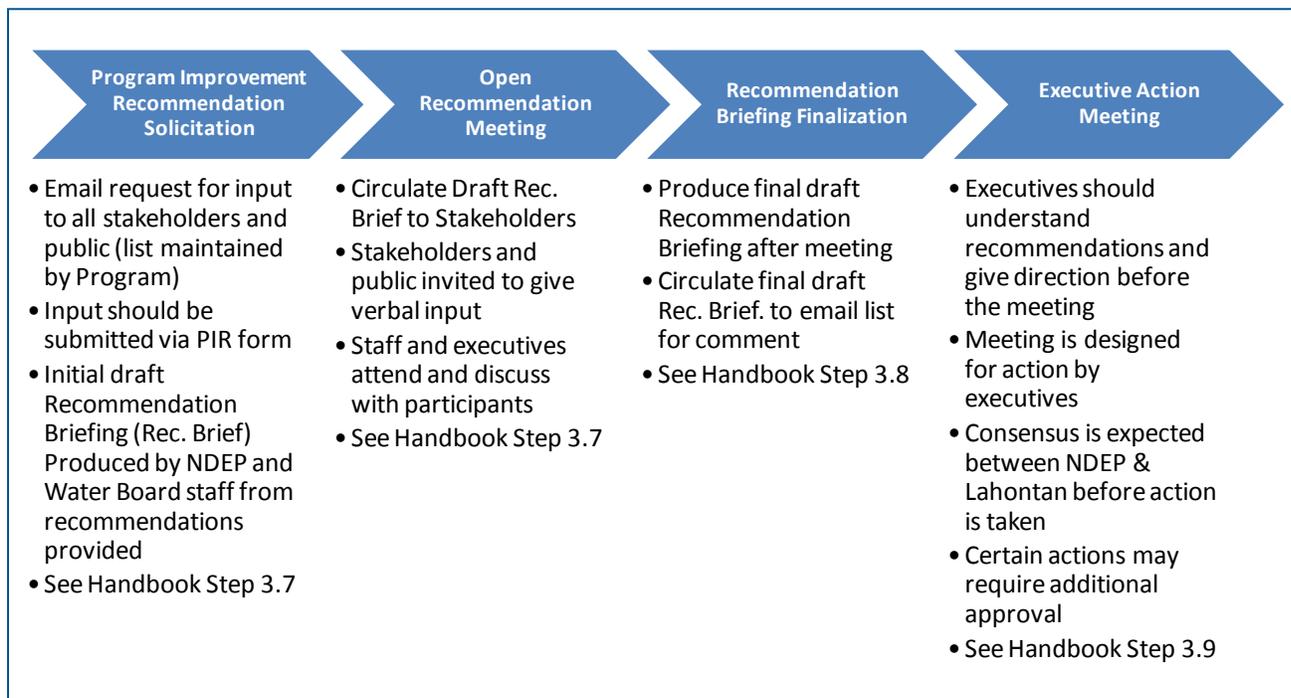
1. Understand process for making and incorporating Program Improvement Recommendations
2. Agree on adoptability of staff recommendations
3. Understand final steps of Support Services Project and revised Handbook timelines

ACTIONS TAKEN

ITEM A. DEFINE EXECUTIVE DECISION PROCESS

Executives made substantive change to the initial recommendation and came to a consensus as described in the bullets and diagram below.

- Recommended changes should be categorized in the Recommendation Memo as “Administrative & Technical”, “For Discussion” and “Requiring Additional Approval”.
- Executive action may not be needed if recommendations are only Administrative & Technical. However they will be documented in the Recommendations Briefing and implemented only after executive confirmation.



ITEM B. ADJUST BASELINE CUTOFF DATE

Executives did not change the baseline date for the TMDL, but came to a consensus that

- Urban jurisdictions can petition to have projects excluded from the TMDL Baseline on a case-by-case basis if the project was completed during the Summer of 2004 and no substantial runoff was treated by the project before October 2004.
- The City of South Lake Tahoe has made a successful case to have their projects excluded from the TMDL Baseline and can be awarded full credit as defined by the Crediting Program Handbook for projects that meet the criteria in the previous bullet.

ITEM C. ADOPT HANDBOOK WITH ADJUSTMENTS

Executives decided to accept this recommendation essentially as recommended.

- Version 1.0 of the Crediting Program Handbook is conceptually adopted based on changes documented in this meeting report and the Recommendation Memo. This conceptual adoption is subject to a final Handbook review by executives.

CONSENT ITEM DISCUSSION

The group discussed Consent Items #3: Catchment Connectivity Consistency and #7: Load reduction Eligibility Clarification. Discussion focused on clarifying questions and suggestions to accentuate aspects of the recommendations. Executives did not act to substantively change any discussion items.

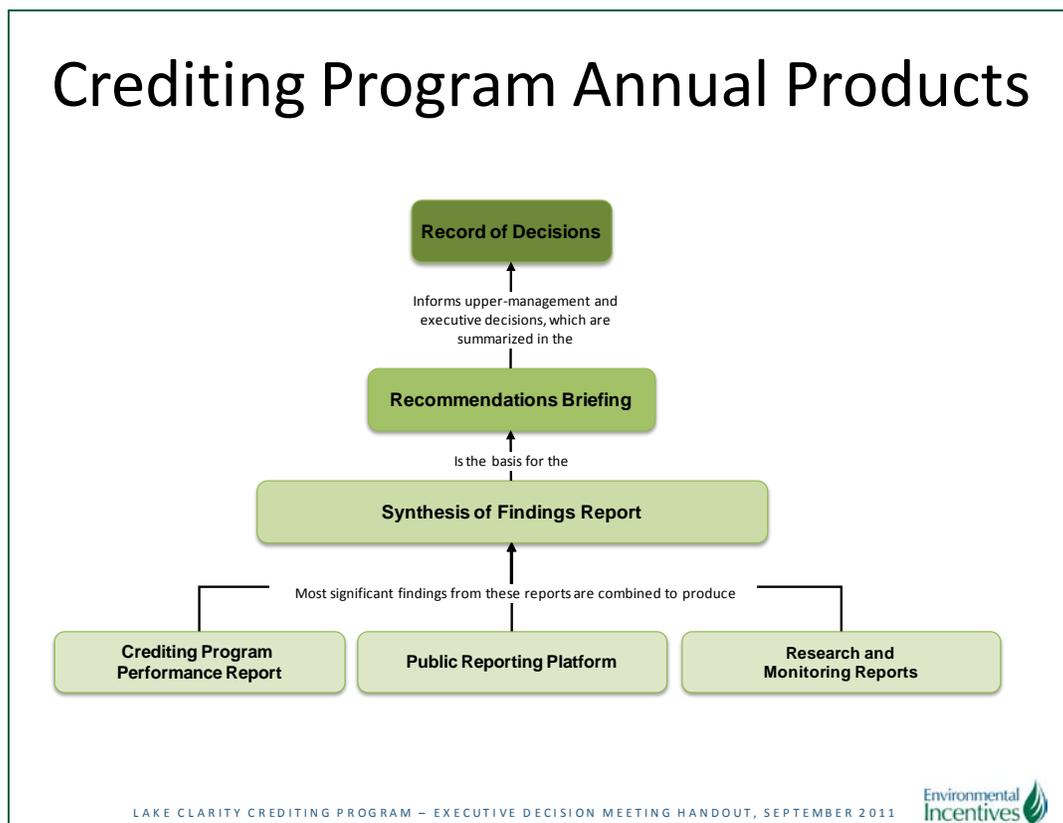
AGENDA (REPRINTED FOR REFERENCE)

TIME	DESCRIPTION	LEAD
3:00	Welcome and context	Praul
3:10	Decision process for the Crediting Program	Sokulsky
3:20	Program improvement recommendations	
	Item A: Define executive decision process	Praul
	Item B: Adjust baseline cutoff date	Larsen
3:50	Break	-
4:00	Opportunity for discussion of	
	• consent items	
	• anticipated future topics & decisions	Kuchnicki
4:30	Next steps toward Crediting Program launch	
	• Item C: Adopt changes to Handbook	
	• CA permit and NV MOA relationship to Crediting Program	Sokulsky
	• 2012 executive engagement plans	
5:00	Adjourn	

REVIEW MATERIALS

1. Annual Products Handout – A slide showing the reports that are anticipated for production in the Crediting program or TMDL Management System on an annual basis. These products are necessary to (1) initiate the flow of information and recommendations to the public and executives, and (2) support the process to incorporate new information into the program. This slide was discussed at the meeting.

2. Recommendations Briefing – A guide to staff recommendations for Crediting Program improvements, including rationale and considerations. This memo was reviewed before the meeting with executives and circulated to urban jurisdictions just before the meeting.



Recommendation Briefing

DATE	September 1, 2011
BY	Environmental Incentives & TMDL Staff
TO	Lake Tahoe TMDL Executives: Harold Singer & David Gaskin
RE	Crediting Program Recommendation Briefing supporting Executive Decision Meeting

The Lake Clarity Crediting Program (Crediting Program) motivates effective action to improve Lake Tahoe clarity by tracking pollutant load reductions and enabling urban jurisdictions flexibility to most efficiently meet load reduction targets. The Crediting Program is systematically improved through a structured decision process to ensure 1) operational efficiencies reduce administrative costs, and 2) new scientific information enables jurisdictions to maximize the load reduction achieved at least possible cost. The decision process is capped with an Executive Decision Meeting where action is taken.

This brief presents recommendations for improving the Crediting Program, divided into two categories: those that require an executive-level discussion and consent items that are not expected to require executive engagement. It also presents a preview of substantial topics that are anticipated to come to executives' attention over the next year.

In preparation for the Executive Decision Meeting, executives are asked to 1) review this Recommendations Briefing, and 2) meet with staff to discuss the items in this memo, and communicate any desired changes to the identified items for discussion or consent.

Key Terms

Crediting Program Handbook (Handbook) – The document that defines the Lake Clarity Crediting Program and protocols for calculating load reductions. Many of the recommendations in this memo are related to changes in the technical guidance section of the Handbook.

Catchment Credit Schedule (CCS) – The form and related technical guidance which jurisdictions use to document calculations and establish performance standards for catchments generating load reductions.

RECOMMENDATIONS FOR DISCUSSION

A. DEFINE EXECUTIVE DECISION PROCESS

Step 3.9 in the Handbook on page 3-12 describes the executive decision process. This recommendation proposes to provide clarifying detail.

Recommendation

- **Decision Process:** Decisions are by consensus of the program partner agency executives
- **Program Partners:** Water Board, NDEP
- **Program Advisors:** US EPA, TRPA and urban jurisdictions
- **Forum:** Annual meeting of program partners and program advisors with all parties expected to review program improvement recommendations and communicate major issues or changes in advance of meeting

Rationale

This decision process is structured to provide a streamlined and nimble process that will not overload staff with excessive effort but will provide executives the context needed to make decisions that are informed by key stakeholders. This decision process will enable the Crediting Program to smoothly

incorporate new scientific findings, program performance information and stakeholder input to enhance the viability of the program over the Lake Tahoe TMDL implementation period.

Issues to Address

- TRPA inclusion as a program partner rather than a program advisor may be considered. This is not recommended because technical capability and regulatory authority are concentrated with Water Board and NDEP, the EPA designates at each State. The Water Board and NDEP are mission-focused on water quality, maintain responsibility for enforcement of the Clean Water Act, and are the primary motivators for jurisdictions to achieve load reduction targets.
- Jurisdictions may wish to participate as program advisors during the executive decision process. These organizations are engaged deeply in the Crediting Program and are often the source of program improvement recommendations. They are also consulted formally in a stakeholder meeting during development of the recommendations memo. Participation in the executive decision process will increase the difficulty for regulatory entity to make decisions in the timeframes necessary to efficiently maintain the Crediting Program. If the collaborative benefits of including regulated entities outweigh the costs in slower decision making; a representative of the regulated entities could be designated as a program advisor.

B. ADJUST BASELINE CUTOFF DATE

The City of South Lake Tahoe (CSLT) submitted an official Program Improvement Recommendation and compelling backup documentation to justify a change to the cutoff date for projects. This cutoff date is important to CSLT and other jurisdictions because projects completed before this date are included in the TMDL baseline and receive substantially less credit than those that are completed after the cutoff date.

Recommendation

- **Adjust baseline cutoff date** from October 2004 to May 1, 2004 in all sections of the Handbook.¹ Sections include: Chapter 0, Chapter 1, and CCS Technical Guidance & Instructions: Section E,

Rationale

CSLT reviewed rainfall and runoff data and found that very little stormwater flowed through projects built during the construction season of 2004. TMDL staff concludes that it is not necessary to include the effects of this runoff in the baseline loading condition.

This adjustment will demonstrate regulators' desire to work with jurisdictions by making a change that helps jurisdictions get the most possible credit for their actions. This demonstration comes at little cost to the Crediting Program because it impacts only a few projects built on the cusp of the baseline.

A cutoff date of May 1, 2004 is appropriate because it is often uncertain if a project is completed exactly by the October 15 grading deadline. The lack of certainty comes from (1) deadline waivers or penalties paid for late project closure and (2) need for administrative time to finish billing and close contracts. Typically no construction occurs during the winter (October-April) and this time can function as a grace period for tying up loose ends on projects that may have been completed on the cusp of the baseline period.

¹ All references to Handbook pages are to version 0.99. Pagination is expected to shift in version 1.0.

C. ADOPT HANDBOOK WITH ADJUSTMENTS

After reviewing all recommendations including consent items, executives can officially adopt the Handbook for use with Memoranda of Agreement and stormwater permits.

Recommendation

- **Adopt Handbook v1.0** based on recommended changes to previously reviewed version 0.99. This adoption will be subject to review of the final document via email in late September 2011.

Rationale

Adjustments to the Handbook are focused on clarity and usability enhancements based on the experience of urban jurisdictions which have pilot tested the program over the last 18 months. Major concepts in version 0.99, such as use of models to estimate expected loading and use of condition assessment tools to award ongoing credit are not changing.

CONSENT ITEMS

The following recommendations should be reviewed by executives but do not require discussion at the executive decision meeting unless called out for discussion by executives.

1. STORMWATER RUN ON GUIDANCE

Expand the technical guidance in Section B of the CCS Technical Guidance & Instructions on page TT-14 of the Handbook for dealing with stormwater from other jurisdictions that runs on to a registered catchment. This guidance will explain a well-thought-out approach to delineate the catchment, model runoff and distribute credit.

Rationale: Most jurisdictions have asked for this guidance so that they can use best practices and minimize time spent recreating an approach.

2. RUNOFF VOLUME TRACKING

Add runoff volume to CCS Section F as a parameter to track.

Rationale: This change focuses implementers on reducing this aspect of the pollutants and is consistent with the Stormwater Quality Improvement Committee (SWQIC) preferred design approach. This parameter is already calculated by the Pollutant Load Reduction Model (PLRM) and would require a negligible amount of extra time to record.

Additional Considerations: Until the Accounting & Tracking Tool is updated, this parameter will only be recorded in the CCS. A tool integration effort is currently underway and should be able to incorporate the runoff volume parameter by the end of 2012.

3. CATCHMENT CONNECTIVITY CONSISTENCY

Provide additional to increase consistency and reduce uncertainty among jurisdictions in estimates of catchment connectivity to surface waters. This addition is recommended for Section D of the CCS Technical Guidance & Instructions on page TT-26 of the Handbook

Rationale: Catchment connectivity identifies the fraction of loading leaves a catchment, and is modeled in PLRM, that is expected reach surface waters and the lake. This guidance has been requested by some of the jurisdictions. The proposed approach and is focused on simply binning similar catchments, but still allows jurisdictions some freedom to select the numeric connectivity percentage within the bins.

Jurisdictions who feel the guidance is not helpful can select a different connectivity as long as they take the time to provide a clear rationale for their choice.

Additional Considerations: The topic of jurisdictional baseline calculations is under some debate by jurisdictions; however the targeted nature of this change to the Handbook minimizes the controversy related to this aspect of connectivity. Urban jurisdictions which define more technically rigorous approaches will be allowed to use their approach provided that they provide documentation and show calculations and assumptions in the CCS Memo.

4. CATCHMENT DISCONNECTION

Make changes in the CCS to allow changes in catchment connectivity between Baseline and Expected conditions of a catchment. These changes are recommended for Chapter 1, page 1-4 and Sections D & E of the CCS Technical Guidance & Instructions on page TT-26 and 29.

Rationale: This change focuses jurisdictions on a strategy to hydrologically disconnect catchments, increasing infiltration that may occur between the outlet of a catchment and surface waters. This strategy shows potential for substantial load reduction.

Additional Considerations: This change cannot be quantified by the standard tool for load calculations (PLRM), so there will be less consistency among jurisdictions in the estimated benefit of this strategy.

5. STANDARD TOOL ISSUES

Add a “known issues” text box to the technical guidance for each standard stormwater tool. For example: the BMP Rapid Assessment Methodology (RAM) database crashes catastrophically when saved on a network drive and then moved to a new location. Recommended Handbook locations for these changes are

BMP RAM - Appendix C, page C-4

Road RAM – Appendix C, page C-7

PLRM – CCS Technical Guidance & Instructions, page TT-26

Rationale: Informs users of potentially time-consuming issues and reduces possible frustration.

Additional Considerations: Focuses users on the standard tools but may reduce confidence in them unnecessarily. Will require future adjustments to the Handbook as the issues are corrected.

6. VERIFICATION CHECKLIST

Add an additional template to the Handbook that helps regulators review and verify CCS forms effectively and consistently. This addition is recommended for the Technical Guidance & Instructions after page TT-39. This addition will reduce use of the Issue Resolution Punchlist by reserving it for intractable issues that cannot be worked out informally.

Rationale: The verification checklist significantly enhances review quality of submitted CCS forms and reduces staff time needed for review. The verification checklist can help jurisdictions understand many of the details upon which their submissions will be judged.

Additional Considerations: Increases the number of forms for users to understand.

7. LOAD REDUCTION ELIGIBILITY CLARIFICATION

A set of findings from stream restoration research and policy discussions leads to recommendations to clarify the load reduction eligibility from stream restoration and other innovative practices that provide load reductions additional to the TMDL implementation plan. These recommendations include

- Add the following policy guidance to Chapter 0, page 0-5.
All pollutant load reductions from urban areas are eligible to be considered for meeting Lake Clarity Credit targets in stormwater permits and memoranda of agreement. This includes any urban stormwater load reductions resulting from improving stream environment zones that result in increased filtration and pollutant capture of stormwater runoff.
- Add the following statement to the CCS Technical Guidance & Instructions Section C, pages TT-17 & 24.

All load reductions achieved in addition to those identified in the Lake Tahoe TMDL Implementation Plan and supported by a rigorous load reduction estimate may be considered to contribute to an urban jurisdiction's Lake Clarity Credits target. Load reductions resulting from stream restoration outside of the Upper Truckee River, Blackwood Creek or Ward Creek may be considered. Similarly, pollutant sinks not directly linked to a pollutant source in the TMDL may be considered, such as load reductions from increasing floodplain deposition of sediments. However, non-urban load reductions identified in the Implementation Plan of the Lake Tahoe TMDL may not be considered to contribute to an urban load reduction target, because they are already accounted for in the TMDL Implementation Plan.

All implementers are encouraged to innovate and develop previously unexpected pollutant control strategies to cost effectively reduce pollutant loading and restore lake clarity. When urban jurisdictions identify effective non-urban load reduction opportunities that were not identified in the TMDL, they should discuss the opportunities with regulators to determine if the opportunities may be eligible to generate credits. For eligible load reduction opportunities the urban jurisdiction and regulator will determine acceptable methods to develop load reduction estimates, document expected conditions and assess conditions over time to determine ongoing performance. Depending on the circumstances, it may not be possible to determine an acceptable estimation method, or equivalency and uncertainty ratios may be applied that will provide assurances that the environmental benefit for non-urban pollutant controls are at least as beneficial to lake clarity as those achieved from urban stormwater reductions.

When a certain type of pollutant control becomes widely implemented, regulators and implementers will develop standard methods to estimate load reductions, document expected conditions and assess conditions over time. Once accepted, these standard methods will be adopted through the Lake Clarity Crediting Program's Program Improvement Process.

Rationale: This recommendation addresses findings that confusion exists about the regulatory classification of stream zone improvements and their relationship to urban load reductions. It also provides incentive for all Crediting Program participants to discover innovative ways to reduce pollutant loads to Lake Tahoe.

Additional Considerations: Uncertainty surrounding the amount of load reduction will be higher for innovative approaches until standard estimation methods and tools become available. This consideration can be addressed through the use of uncertainty ratios until standard methods are developed.

8. OBSERVATION-PARAMETER CROSSWALK

Provide a crosswalk between condition assessment observations in the BMP RAM and PLRM parameters that model expected conditions. This addition is recommended for Section C of the CCS Technical Guidance & Instructions after page TT-20.

Rationale: This product will substantially clarify the critical linkage between expected conditions modeled in PLRM and actual conditions assessed with the RAMs. Jurisdictions have expressed desires for this additional guidance.

Additional Considerations: Many of the linkages are not direct and technically rigorous at this time. For instance the Constant Head Permeameter measurements of infiltration rate in the BMP RAM do not provide comparable information to the infiltration rate field for BMPs in PLRM. SNPLMA-funded research is currently underway to provide scientific guidance on this issue and is expected to inform future improvements.

9. ROAD RAM INTEGRATION

Update Handbook guidance to reflect Road RAM concepts, for instance the Road Group concept will be converted to the Road Class concept. The Handbook was completed about a year before Road RAM and several concepts have evolved substantially. These changes are recommended for Section C of the CCS Technical Guidance & Instructions on page TT-21 and Appendix C: Credit Award Method, page C-7.

Rationale: Misalignment between the PLRM and Road RAM are a source of substantial confusion among jurisdictions that have learned how to use the Crediting Program. This Handbook update will synchronize terminology and concepts.

Additional Considerations: the design of the PLRM was completed before Road RAM was complete and lacks certain features that would facilitate comparison of actual conditions to expected conditions. For example, there is no single water quality rating for Road Groups and PLRM uses an activity-based system for predicting runoff pollutant concentration. This update to the Handbook will make several changes, but will focus on describing the relationship between PLRM maintenance activity -> pollutant concentration curve and the corresponding Road RAM pollutant concentration curve -> RAM score. Changes to PLRM are necessary in the future and are not possible through the Support Services contract.

10. LOAD MODELING METHODOLOGY

Update Handbook technical guidance regarding when to use the Private Property BMP versus Treatment BMP methodology to calculate load reductions in PLRM. This change is recommended for Section D of the CCS Technical Guidance & Instructions, page TT-27.

Rationale: Jurisdictions are free to use the methodology that best suits their needs, but there may be strategic choices that can maximize credit. This guidance will help all jurisdictions realize these choices and level the playing field used by the Crediting Program.

11. BASIC EDITORIAL ADJUSTMENTS

Make basic usability enhancements and editorial clarifications throughout the Handbook and CCS. Staff and the consultant team are currently

- a. Changing order of Inspection Summary and Maintenance Summary
- b. Changing units of pollutants to match PLRM – saves conversion effort and errors; can be converted to TMDL (metric) units en mass at a later time if necessary
- c. Changing order of CCS pollutant fields to match PLRM output order
- d. Aligning Private Property BMP section of CCS to match with PLRM inputs and outputs – reduces effort and comprehension issues with users
- e. Making minor text edits – punctuation, word choice and layout that do not substantively change Crediting Program or TMDL concepts

ANTICIPATED FUTURE TOPICS & DECISIONS

Executives should be aware of several topics that are actively being discussed and may require a decision during one of 2-3 executive interactions anticipated during 2012. These topics should be discussed with staff, but are not expected to be discussed in the September 2011 executive decision meeting.

JURISDICTION-WIDE CREDITING

Allow jurisdictions to earn Credits from activities in areas outside of registered catchments. This topic has been brought up by several jurisdictions in regard to their road maintenance activities.

Rationale: A policy allowing jurisdiction-wide crediting would reduce administrative overhead and create a practical alternative to registering every catchment before receiving Credits for pollutant controls that are acknowledged to produce substantial load reductions (e.g. abrasive management and sweeping). This desire can be satisfied through use of a special CCS that includes the entire jurisdiction.

Lake Clarity Credits (Credits) – One credit is equivalent to 1×10^{14} particles of <16 micron fine sediment, or roughly 200 pounds. Credits are generated by implementing pollutant controls such as effective operation and maintenance of roads, stormwater treatment and policies. Credits are awarded on an annual basis based on evidence that pollutant controls are operating at or near performance expectations.

Additional Considerations: This complicates program by necessitating a special form and requiring that jurisdictions subtract jurisdiction-wide load reductions from those calculated when new catchments are registered.

CREDITING NON-URBAN SOURCES

Staff and interest groups have raised the topic of giving credit for non-urban source categories

Rationale: Any bonafide load reduction is valuable for enhancing lake clarity. The infrastructure of the Crediting Program does track estimated Load Reductions. The TMDL Management System project is developing template crediting protocols for other source categories in 2012-2013.

Additional Considerations: The Crediting Program is currently focused on urban sources because (1) they are the largest portion of the load, (2) there will be mechanisms in place to enforce Credit requirements and (3) building a focused program will allow major issues to be resolved before complications arise due to additional source categories.

TMDL MANAGEMENT SYSTEM & TOOL INTEGRATION PROJECT

Many enhancements to the Crediting Program are expected through two efforts that have been recently funded. The TMDL Management System project will define the critical processes necessary to sustain the TMDL over time and produce the first set of key products, including

- a. **TMDL Performance Report**
- b. **Public Reporting Platform**
- c. **Synthesis of Findings**
- d. **Stakeholder participation process**
- e. **Lists of operational improvements and areas for investigation**

The Tool Integration Project will connect and streamline the technology tools that manage information for the TMDL and Crediting Program.

The major products that come from these efforts are expected to strategically complete program needs and several will be reviewed by the executives.