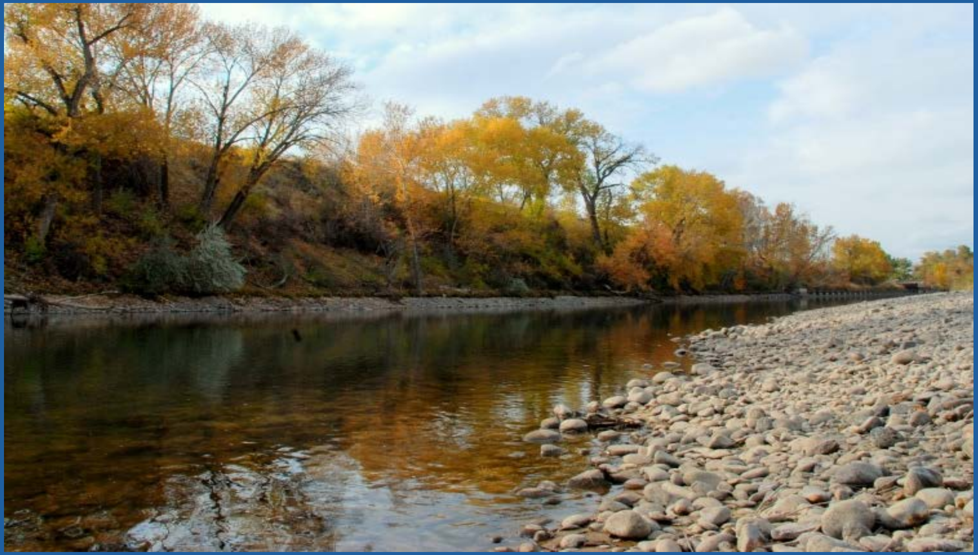
Lower Boise River Technical Advisory Committee for Water Quality Trading



April 27, 2016

Meeting #4:

Foundations for Revising the Lower Boise River Water Quality Trading Framework

Agenda

Morning (10:30am-noon)

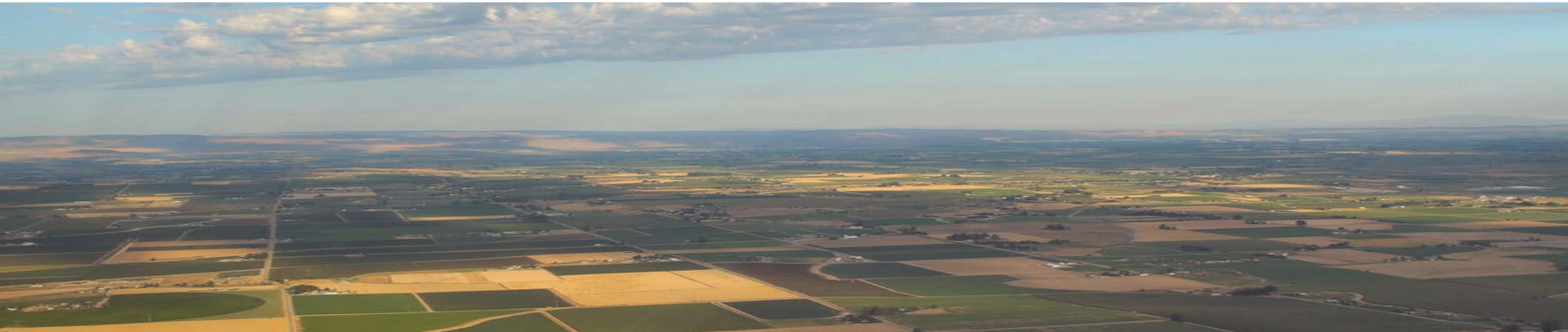
- Status update on action items
  - Trading unused wasteload allocations
  - Baseline
  - Trading Ratios
  - Quantifying methods
  - Avoiding localized impacts.
  - Credit life

Afternoon (12:45-4:00pm)

- Project Review and certification
- Compliance and enforcement
- Improving the framework over time

Meeting Objectives

- Review new Framework concepts and provide direction on Framework contents.
- Continue to exploring action items from March 28th meeting.
- Identify details of concepts that can be incorporated into next version of draft Framework.



Action Items: Baseline- Making Progress

What we heard from EPA: Need to demonstrate progress towards meeting water quality goals.

Options:

A) On-farm BMPs: Implementation of at least one BMP from conservation plan.
   Other Project types: Retirement of X% credits.

B) Use retirement trading ratio as baseline (20%)

C) Point-sources retire 5% of credits every permit cycle.

Action Items: Trading Wasteload Allocations

Reviewer feedback:

If net environmental benefit and an evaluation criteria for trade approval is well defined, theoretically not feasible to trade unused wasteload allocation.

40 CFR 122.4(i) Any new or expanding point source discharge allowed only through reserve allocation OR demonstration of reduction through trade.

Draft State Guidance:

All point-source trades must be reviewed by DEQ and EPA.

For point source sellers, baseline is represented as the most stringent WQBEL in NPDES permit.

Action Items: Trading Ratios

Reviewer feedback:

Uncertainty ratios are not applicable to constructed wetlands/basins because factors listed as contributing are controlled for by direct measurement.

Uncertainty ratio can be adjusted downward by as much as **2.0**, with approval from DEQ and EPA through direct measurement.

Options:

2:1 as proposed

1.5:1 based on Dixie Drain

Uncertainty ratio reduction that reduces to greater than 1:1.

Action Items: Quantification Methods

Proposed in draft Framework:

SISL is approved quantification method for all on-farm BMP project types.

Options:

SISL is approved quantification method for all <u>irrigation related</u> project types. May not include:

- -Cover-crop
- -Constructed wetlands/basins
- - Other project types?

Identify (and approve) other quantification methods for other on-farm BMP project types.

Action Items: Public Conservation Dollars

Proposed State Guidance:

Credit portions of project cannot be funded with cost share funds, but cost share funds can be used to meet baseline requirements

Action Items: Avoiding Localized Impacts

Outstanding action item:

- Draft paragraph to capture previous discussions around periphyton and localized impacts as it pertains to the Lower Boise River and its watershed dynamics.

Action Items: Credit Life - Hold

Feedback from EPA:

- Not supportive of annual credit life because not all forms of phosphorus (and hence BMP improvement) have equal impact on loads in groundwater.

Options:

- Seasonal credit life (summer/winter credits)

Hold action item for further discussions with EPA and technical staff.

Project Review, Certification, and Tracking

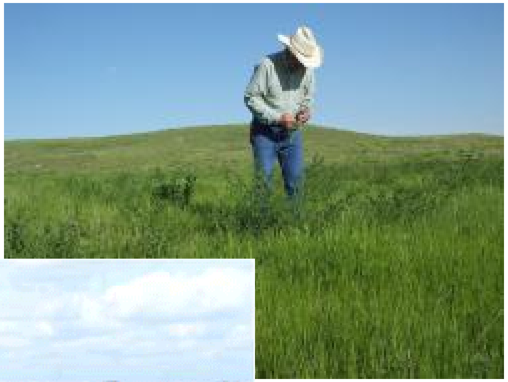
Project Site Screening → Project Review (Initial) → Credit Issue and Tracking → Project Review and Tracking (Ongoing)

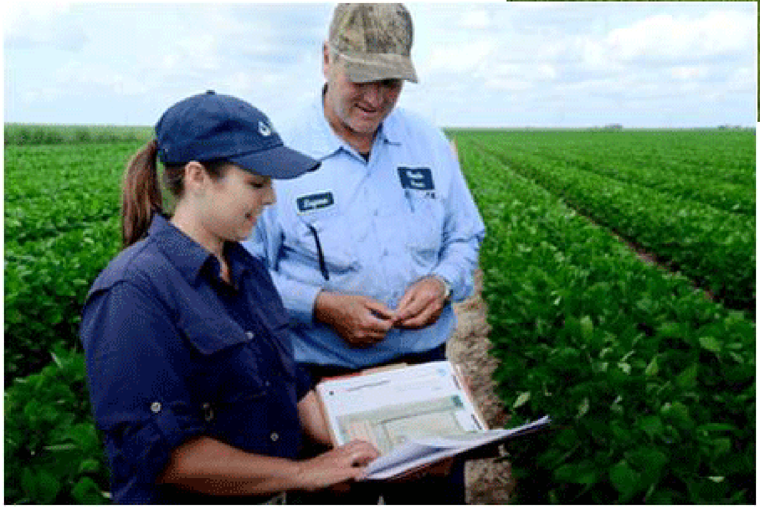
- **Site screening**: Vetting proposed projects for program eligibility.
- **Project review: C**onfirming that credit-generating projects have completed required elements.
- **Credit issuance**: Projects are certified and credits are made available for sale and/or use.
- **Credit tracking:** Credits are serialized and accounted for using a ledger or registry.

Roles and Responsibilities

Who should administer program tasks?

- Agency or agencies
- Permittees
- Third parties
- Combination





Project Site Screening

- The process of vetting proposed projects for program eligibility.
- Process requires initial cost and time for project developers, but can mitigate time or costs spent on projects later deemed ineligible.
- Screening may be unnecessary for commonly applied project types or if eligibility criteria are few.

Project Site Screening

Options	Consideration
Required	• Additional initial costs. • Reduce time and cost for ineligible projects. • Allows administrators to become familiar with projects early.
Voluntary	• Project developer's discretion to incur additional costs of screening. • Cost savings for standardized project types. • Higher risk of projects not being approved.
Not done at all	• Project screening may not be necessary for project developers who are highly familiar with eligibility requirements or if eligibility criteria are clearly defined.

Guiding Questions

- Is criteria well enough defined (for all project types) that project screening is not necessary?
- Should project site screening be required or voluntary?

Project Review

Project Site Screening → Project Review (Initial) → Credit Issue and Tracking → Project Review and Tracking (Ongoing)

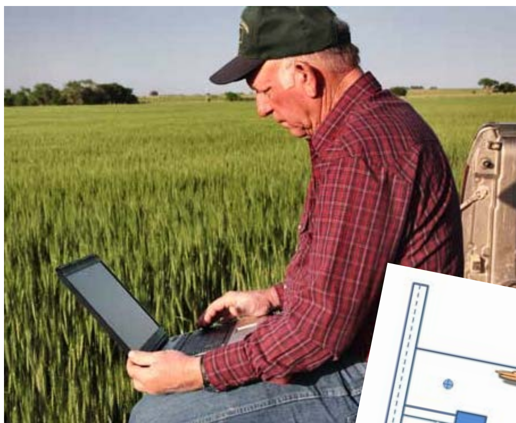
Project review procedures should consider:

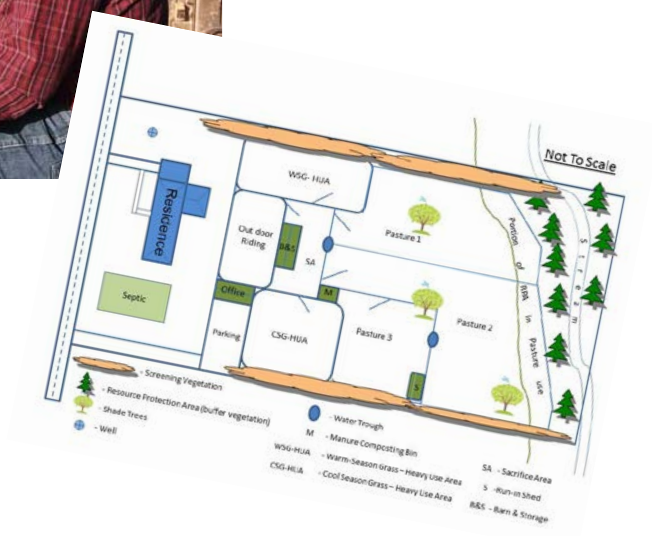
- what project information is reviewed;
- how and when projects receive final approval;
- how disputes will be resolved; and
- intervals at which multi-year projects are reviewed and approved.

Initial Project Review

Administrative review

- Completeness – documentation is complete
- Correctness – documentation conforms with standards





Potential Project Documents

- Basic project information
- Project design and management plan
- Pre and Post project site conditions
- Credit estimation calculations
- Project protection and stewardship agreements
- Monitoring plans

Initial Project Review

Technical review

- Quantification is complete and accurate

•May not be necessary when standardized quantification methods are used or credit quantification calculations are completed by program administrators.

p or ACTIVITY GM ($/unit):			-4	90	40	25	-5	10	12	0	100	140	180	15	40	0	0	-1
			I: JAN-TO-JUNE					II: JUL-TO-DEC		YEAR-ROUND OR BOTH I AND II						BARTER OR TRANSFER		
RESOURCES/ CONSTRAINTS	INITIAL LEVEL OF RESOURCES (B)		Grow maize	Process and sell maize chips	Grow and sell beans	Grow and sell paddy	Buy leaves or humus	Grow and sell soy-beans	Grow and sell peanuts	Keep cows	Sell raw milk	Make and sell butter	Make and sell cheese	Grow and sell cassava	Grow and sell chili	Barter milk for field labour	Transfer Feb. house-h. labour to Feb. field labour	Transfer cash to meet Phase II needs
SPECIFIC TO PHASE I	Activity unit:		(1pk[a])	(1t)	(1pk)	(1pk)	(1t)	(1pk)	(1pk)	(1 cow)	(1t)	(1t[b])	(1t[b])	(1pk)	(1pk)	(1t)	(1 person)	(1$)
Estab.+operating cash	$	100	4	0	0	8	5	0	0	0	0	0	0	5	4	0	0	0
Land	pk[a]	10	1	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0
Feb. field labour	days	80	6	0	0	10	0	0	0	0	0	0	0	2	3	-200	-28	0
Feb. house-h. labour[c]	%	100	0	0	0	0	0	0	0	20	0	10	15	0	0	0	25	0
Other house-h. labour	%	100	0	0	0	0	0	0	0	20	0	10	15	0	0	0	0	0
Trellis for beans	pk	0	-1	0	1	0	0	0	0	0	0	0	0	-1	0	0	0	0
GENERAL, APPLY TO BOTH PHASES I AND II																		
Cowfeed roughage	t	20	-2	0	-0.4	-0.1	0	-0.4	-0.5	6	0	0	0	-0.1	0	0	0	0
Maize grain pool	t	0	-0.3	1	0	0	0	0	0	0.7	0	0	0	0	0	0	0	0
Field base fertility	unit	1	1	0	-0.2	1	-0.1	-0.3	-0.3	-3	0	0	0	1	1	0	0	0
Milk pool	t	0	0	0	0	0	0	0	0	-1.5	1.5	1.5	1.5	0	0	1	0	0
Cash income available for use in Phase II	$	0	0	-90	-40	-25	0	0	0	0	-50	-70	-90	0	0	0	0	1
SPECIFIC TO PHASE II																		
Estab.+ operating cash	$	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	-1
Land (i.e., general land)	pk	10	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0
Ex-paddy land	pk	0	0	0	0	-1	0	1	1	0	0	0	0	0	0	0	0	0

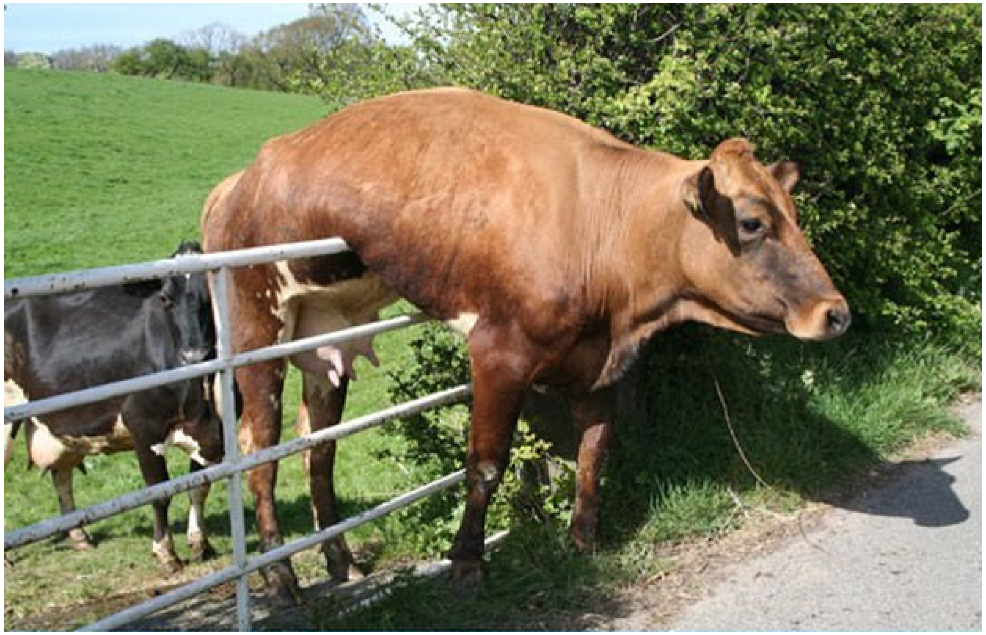
[a] pk here denotes patok, the area basis for crops; one patok is about 0.1 ha.
[b] Basis is per tonne of milk, not of processed product.
[c] Four persons.

Initial Project Review

Confirmation of project implementation and/or performance.

Forms of confirmation:

- Onsite inspection
- Self-reporting
- Remote sensing



Ongoing Project Review

- Ongoing project review re-evaluates credit quantity if the project performance or program standards change.

- Guidelines typically include:
    - process and frequency project implementation is reviewed;
    - if all projects are reviewed;
    - what project components are reviewed;
    - when the project may cease ongoing review.

Dispute Resolution

Agency project review: Disputes likely to be handled through Agency dispute resolution process.

Third party project review: Dispute resolution process should be determined ahead of time and incorporated into the contract for services.

Credit Issuance and Tracking

- Once projects are certified/approved, trades are registered and credits are **issued** to use or sell.

- Programs track credits by:
  - Agency maintained ledger/registry or
  - centralized web-based ledger (Markit)

- Program developers need to decide what information to track
  - Ongoing project status
  - Trades
  - Credit status – (active, retired, suspended, retired)

Public Availability of Information

- Types of information frequently of concern:
  - Property owner contact information
  - Project location
  - Project design
  - Land protection agreement
  - Stewardship and/or monitoring plan and information

- Clean Water Act, Freedom of Information Act, and state privacy laws will be the primary drivers in determining what information and documents may be publicly available.

Compliance and enforcement

- Compliance is strongly linked to verification and ongoing review.
- National Network discussions on compliance centered around how much detail is provided on defined project types, project design criteria, and maintenance standards.
- Compliance can include just permittee’s credit balance or balance and credit validity.

Compliance and enforcement

- Insufficient credit balance or failure to meet other permit conditions would generally trigger a non-compliance event.

- Most states use current enforcement provisions for NPDES permits with trading.

Project Protection and Stewardship Requirements

Programs and/or buyers may require certain levels of assurances that projects are implemented and functioning.

- Project assurances may include legal instruments such as contracts, leases, easements.
- The level of protection likely related to project type and life.
  - May require minimum protection period.
- Project stewardship funds help ensure function for the life of the project.
  - Performance bonds, insurance, restricted accounting.

Program Improvement

Trading Programs are most likely to seek changes driven by:

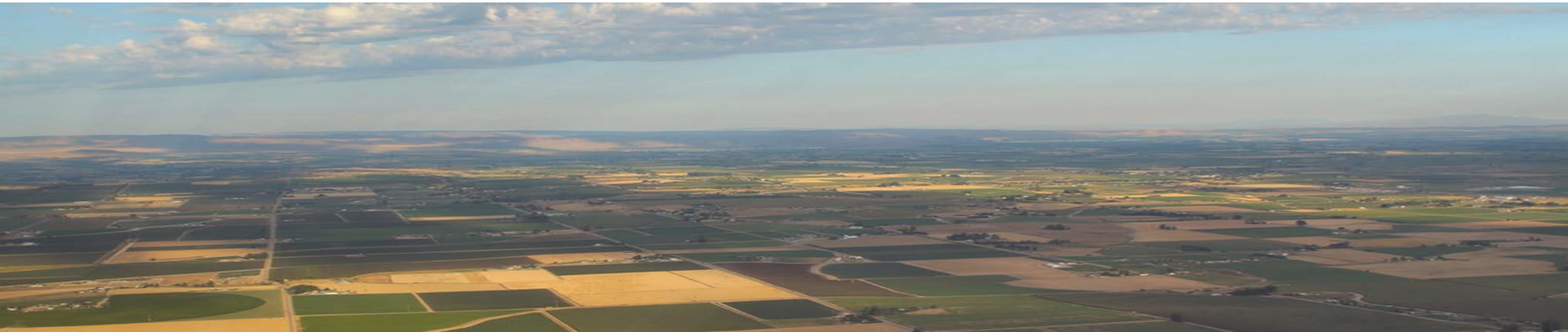
- improved quantification methods;
- new project types as eligible credit-generating actions;
- evaluating program effectiveness and efficiency in meeting permitting requirements and over-all watershed goals and objectives.

Guiding Questions

- What might an adaptive management process look like?
- Who should be involved?
  - WAG?
  - TAC?
- When and how should stakeholders and public be involved in process?

Meeting Wrap-up and Action Items

- Summarize key recommendations or proposals
- Identify key action items and responsible parties
- Planning for next meeting



Thank You for Participating!