2nd Annual Status Report
Lower Boise River Effluent Trading Demonstration Project
Idaho Department of Environmental Quality

June 28, 2002

REPORTING PERIOD: April 28, 2001 – April 30, 2002

INTRODUCTION:

This report is prepared in compliance with the Inter-Agency Agreement on the Lower Boise River Effluent Trading Demonstration Project: Statement of Understanding and Responsibilities, dated April 21, 2000.

OVERALL PROJECT STATUS:

No trades have been made. And, predictability, none were attempted during the past year.

Notwithstanding, significant progress was realized when the Soil Conservation Commission finalized the BMP List. Under Dave Ferguson's leadership, a list of surface irrigated cropland BMP's was crafted, reviewed and distributed to stakeholders. The list will be incorporated into the State Trading Guidance document.

Another major accomplishment was the development of the Snake River – Hells Canyon (SR-HC) TMDL. The SR-HC TMDL is emerging as the primary driver in the overall trading equation.

ANNUAL MEETING SUMMARY:

Background

The Idaho Department of Environmental Quality (DEQ) held the second annual Lower Boise River (LBR) Water Pollution Trading Meeting on April 30, 2002. The purpose of this meeting was to provide LBR watershed stakeholders with an update regarding progress made on developing the institutional infrastructure needed to support phosphorus trading and to discuss the implications of the draft Snake River – Hells Canyon TMDL for trading activity in the LBR watershed. The agenda for this meeting is provided as Attachment 1. As indicated in the Agenda, the meeting covered five major

topic areas: EPA Trading Policy Highlights; Other Trading-Related Efforts; BMP List Development Efforts; TMDL Updates and Associated Discussion; and General Updates and Action Items. A summary of discussions from each session is provided below.

EPA Trading Policy Highlights

Claire Schary, EPA Region 10 Trading Coordinator, provided general background information regarding the EPA's proposed Water Quality Trading Policy and identified comments EPA Region 10 had prepared and submitted to EPA Headquarters. Key discussion points included the following.

- EPA Region 10 expects EPA Headquarters to release the proposed Water Quality Trading Policy officially in the Federal Register sometime during the next 4 to 6 weeks. There will then be a formal comment period of approximately 30 days. Headquarters staff has also indicated that they plan to prepare trading implementation guidance later in the year.

- EPA Region 10 comments focused on the need to further clarify the following topics:
  - Content of NPDES permits to enable trading;
  - The point in the trading process where EPA will require/desire public comment;
  - The use of alternate permit limits;
  - Clean Water Act regulatory liability application to trading parties; and
  - EPA role in trade approval under delegated and non-delegated situations.

- Discussion briefly touched on a letter submitted by a collection of national environmental interest groups that indicates a variety of concerns about trading including the ability to hold point sources fully accountable for trades, the verifiability of non-point source trades, and the need to obtain trade-by-trade regulatory approval. Certain of these observations appear to be inconsistent or in conflict with the LBR trading framework (which had earlier received support from some environmental interest groups).

- A number of the participants in the meeting believed that the LBR framework has established highly effective and locally tailored solutions to Clean Water Act liability, environmental equivalence metrics (trading rations), localized impacts, and a non-point source water quality contribution that encourages early non-point source implementation. These participants expressed concern that the proposed policy might preclude or constrain these aspects of the LBR trading framework and encouraged other stakeholders to undertake a close read of the proposed policy when formally released and provide comments as needed.

- EPA Region 10 indicated that it would notify stakeholders when EPA Headquarters releases the policy for comment.

Other Trading-Related Efforts

This session covered four topic areas: Middle Snake River trading effort; Snake River-Hells Canyon trading effort; Oregon trading effort; and the Treasure Valley Ag. Lands Characterization.

- Rob Greenwood provided a brief overview of current work for the Middle Snake River (MSR) Trading effort. Current work is focusing on developing model NPDES trading permits. One permit is an individual NPDES permit held by the City of Twin Falls for its wastewater treatment plant. The second permit is a general permit held by Clear Springs Food. EPA Region 10 is currently preparing the permits, which will include a variable permit limit as envisioned in the LBR trading framework. It is expected that a meeting of MSR stakeholders will occur in early to mid June to discuss the draft permits.

- Rob Greenwood also provided a brief overview of the Snake River-Hells Canyon trading effort. This effort, funded by the DEQ state office, is designed to examine the feasibility and desirability of trading under the Snake River-Hells Canyon TMDL. The effort involves a review of TMDL data to understand pollutant loading patterns (type, quantity, location) and associated allocations and the conduct of interviews with watershed stakeholders to gather perspectives on trading opportunities and constraints. A report is due in mid-June.

- Claire Schary provided an update on EPA-funded trading efforts in Oregon. EPA has provided the state with a $200k grant to examine opportunities for water pollutant trading. Oregon has formed a stakeholder group (in response to state legislation supporting trading) to oversee selection of a watershed for trading. This group is still in the process of identifying a suitable watershed, but they have determined that there are limited opportunities for nutrient trading (since few completed nutrient TMDLs currently exist). In response, the group is focusing on temperature trading, with a TMDL affecting the city of Pendleton as an area of interest.

- Scott Koberg and Keith Griswold from the Idaho Soil Conservation Commission provided an overview of the Treasure Valley Ag. Lands Characterization. Scott and Keith explained the research and analysis conducted to support the characterization as well as the GIS-based tool they had developed. The characterization has involved a detailed inventory of agricultural lands and a prioritization of them from the standpoint of addressing LBR TMDL objectives. To this end, the characterization includes a "field impact model" that indicates the relationship of agricultural lands' location to the effect BMP implementation will have on water quality. This information, and the underlying automated model, can help Treasure Valley farmers to identify trading opportunities.

BMP List Development Efforts

David Ferguson from the Idaho Soil Conservation Commission provided a briefing on the status of the BMP list development efforts. David indicated that the list was essentially complete, with all necessary technical work completed and consensus reached by the state BMP technical committee regarding the content of the list. The next critical step is for the list to receive public review. DEQ plans to coordinate this review with the public comment period for the statewide trading guidance document. Release of both documents for review is expected in about 30 to 60 days.

During discussion about the BMP list, participants did identify one suggested change to the document. This change came in response to a discussion that indicated an evolution in the BMP technical committee's thinking regarding measured credits. The current draft list indicates that measured credits are "not recommended" for most of the listed BMP's. The Technical Committee, after considerable discussion, had concluded that measuring phosphorus reductions from the majority of listed BMP's is not technically feasible. After some discussion, meeting participants recommended that the BMP list use stronger wording, shifting from "not recommended" to "not accepted" and/or to alter the table containing this information (Table 3) to delete entirely the "measurement" column.

Lower Boise River and Snake River-Hells Canyon (SR-HC) TMDL Updates and Discussion

Bryan Horsburgh from Idaho DEQ provided an update on the Lower Boise River TMDL. The following key points were made.

- DEQ completed a nutrient subbasin assessment for the LBR during 2001. The assessment indicates no nutrient-related water quality impairment. As a result, DEQ currently has plans to propose delisting the LBR for nutrients.

- At the same time, the SR-HC TMDL will drive the need for phosphorus reductions in the Boise River. The Draft TMDL allocates a 78 percent reduction at the mouth of the LBR. This is a seasonal reduction requirement (May through September).

- DEQ expects, in response to this allocation, to develop waste load allocations for permitted dischargers and load allocations to non-point source river tributaries in the LBR watershed.

- Approval of the SR-HC TMDL (expected in about six months) will trigger an 18-month DEQ implementation planning effort for the LBR. This plan will be the mechanism by which allocations for both point and non-point sources of phosphorus will be developed.

- The subbasin assessment indicates that the phosphorus assimilative capacity in the LBR is higher than originally expected. This will provide some enhanced flexibility to trading efforts with respect to localized impacts, though caps on trading activity will likely still be needed to ensure none emerge.

Tonya Dombrowski provided an overview of the SR-HC draft TMDL. Key points included the following.

- The public comment period for the draft SR-HC TMDL has just closed and DEQ is currently processing comments. The SR-HC TMDL will still require EPA Region 10 review and approval. DEQ's current expectation is that final SR-HC TMDL approval can happen sometime during the next six months.

- The draft SR-HC TMDL assigns phosphorus allocations to the mouths of the major Snake River tributaries (including the LBR), as well as direct sources (point and non-point) to the mainstem of the river. These allocations are based on meeting water quality standards in the river upstream from Brownlee Reservoir (river mile 409 to river mile 335). Waste load allocations to six point source dischargers have been assigned based on implementing biological nutrient removal. The TMDL makes total phosphorus and dissolved oxygen allocations on a seasonal basis (May – September).

- The draft TMDL also assigns a dissolved oxygen (DO) allocation to Idaho Power for Brownlee reservoir. This allocation is based on a residual DO need after the Snake River upstream from Brownlee meets nutrient-related water quality standards.

- Under the TMDL, there is the potential for three types of trading:
  - Upstream to downstream within the mainstem of the Snake River;
  - Tributary to tributary; and
  - Within tributaries.

In response to the briefings on the LBR and SR-HC TMDLs, meeting participants raised the following questions and points.

- In the context of the planned LBR implementation plan, the need to assign Load Allocations in a manner consistent with supporting trading (specific to potential trading entities and sufficient to establish a baseline against which the creation of credits could be determined) was identified.

- In light of the DEQ expected effort to delist the LBR for nutrients, a concern was raised about the ability to issue NPDES permits containing phosphorus limits. DEQ indicated that they believed this could be done as an "extension" of the SR-HC TMDL. Agreement was reached that follow-up with EPA Region 10 to obtain further clarity on this point was desirable.

- The timing of who will need to reduce when was identified in relation to expectations for when a phosphorus market might emerge and whether the timing of the requirements were aligned in a manner to support trading. Participants indicated that the tributaries from Oregon are not scheduled for TMDLs until 2005 and 2006 and that certainty with respect to needed reductions from the LBR will not emerge for approximately 18 to 24 months. This indicated to the group that it likely would be at least two years before the regulatory drivers would be in place with sufficient certainty to drive trading activity. The difference in timing between Oregon and Idaho tributary TMDLs is a consideration that may influence trading activity between these tributaries

- Meeting participants also identified the level of reduction requirements (using the draft 78 percent reduction target for purposes of discussion) as impacting expectations for the amount of potential trading activity. In this context, the ability of some of the various phosphorus sources along the LBR to produce cost-effective (and attractive) phosphorus credits under this requirement was in doubt. This consideration suggested to participants that trade activity could be smaller than was originally anticipated during the LBR trading program development efforts. The consideration also suggested to participants that watershed-scale or basin scale non-point source reduction efforts might be the only cost effective means for producing phosphorus credits.

- Participants discussed the possibility that nutrient trading might play a role in meeting the DO allocation to Brownlee reservoir.

- Participants also indicated that the LBR, SR-HC TMDL implementation strategy (particularly the allocation basis used for point and non-point sources) would substantially influence the potential need for trading. In this context, participants indicated that the SR-HC allocation approach may not serve as a basis for the LBR given the differences in the proportion of phosphorus load contributions among the various source categories.

- Overall, it appeared that certain aspects of the draft SR-HC TMDL and LBR sub-basin assessment establish conditions favorable to trading (e.g., more loading capacity in the LBR than originally anticipated, seasonal TMDL that aligns with non-point sources ability to create credits). However, the extent and timing of required reductions could alter the timing and overall amount of trading activity. In particular, the expectation was that the need for trading would not likely emerge for several years and, when it does, the market may be smaller than originally anticipated.

General Updates

- State Trading Guidance: Susan Burke from the Idaho DEQ State Office provided the Guidance update. Susan indicated the Guidance was nearing completion with the only area of major remaining work relating to what to say about the development and use of environmental equivalence metrics (e.g., trading ratios) and how watersheds can address local water quality impacts. She indicated that DEQ expected to complete this work in the next 30 days and be in a position to put the document out for public comment soon thereafter.

- Idaho Clean Water Cooperative: Bruce Smith provided an update on the Cooperative. Bruce indicated that the non-profit was in place with the Board established. However, one of the three initial Board members, Marti Bridges, had changed jobs and, as a result, resigned. This leaves the environmental/community interest chair currently vacant. There is a need, therefore, to recruit for this position. Further work developing the cooperative, such as establishing the ability to process and track trades, is on hold pending the emergence of clear drivers for trading activity.

- World Resources Institute MOU: Claire Schary provided an update on the WRI MOU. Claire indicated that WRI had not obtained further funding for its "Nutrient Net" efforts. Paul Faeth, WRI lead for this effort, has indicated that WRI does not expect to be in a position to work with Idaho in the near future as a result.

Next meeting:

There was a general consensus for another update meeting next year.