



Oregon Solutions Project Team – Applegate Sustainable Aggregate Project
General Meeting Notes

March 12, 2009

Present: Dennis Halligan, Jay Stallman, John Ward, Jack Shipley, Jeannell Wyntergreen, Geoff Becker, Bryan Ross, Frank Schnitzer, Chuck Wheeler, Jim Threadkill, David Haight, Lin Bernhardt, Jeff Griffin, Steve Rouse, Ian Reid, Anita Huffman, Jim Buck, Guenter Ambrose*, Lesley Adams, Jim Buck, Dwight Ellis, Joan Resnick

**guest*

Next meeting: April 9, 2009, 1:00 – 4:00 pm, RVCOG Conference Room

I. Updates & Information

Bryan Ross, Copeland, and Ian Reid, USFS, attempted to collect sediment samples from above-the-dam since the last meeting but the water was too high. They will revisit in the fall, 2009.

√Agreement -- OSPT agrees that the information needed for the above the dam is the sediment characterization, now scheduled for fall 2009. USFS, Copeland, and possibly SOU geology dept. (?) to complete.

90 Day Team – No report, will defer discussion next time to CW; Pete Dalke to report on stimulus discussions/decisions.

Tech (“Data”) Team – see RVCOG website for technical papers, etc. Note from RVCOG: please work through tech team to populate website so RVCOG has one person for contact purposes. There is a question about copyright issues for journal on the RVCOG website. Suggested that we use the link to such a journal if possible, ask for permission, or, since papers are not being used for profit, it may be ok.

As our focus moves away from instream to other components, Frank Schnitzer will now chair the tech team to work on the requested items (from previous meeting notes, attached) for the OSPT. Frank announced that tech team will meet within 10 days.

II. Handouts/Email Documents for group review

Long Term Economic Analysis –excerpts from the DOGAMI analysis of long term projected consumption of aggregate in Josephine and Jackson County, dated _____.

Rogue Flyfishers Declaration of Cooperation Statement –Rogue Flyfishers draft commitment for the Declaration, stating how they will support and contribute to the project.

**note – all OSPT members are asked to bring statements to the next meeting.*

Reconnaissance Level Assessment to Determine Vertical Channel Stability– Constructed by USFWS- Two pages describing the permit approval process that Federal Agencies have agreed to, and listing sources of information for the first phase of the process.

Full cost Economic study proposal – email from Jimmy MacLeod for OSPT review and decision.

Project definition to include sustainability – Steve Rouse sent out a paper to follow up on the project definition per OSPT agreement. The piece of the definition to which there was consensus at the last meeting is:

√The Applegate Project will attempt to define a meaningful and measurable sustainable natural resource planning framework that seeks to balance the economic need for appropriate aggregate extraction while protecting sustainable aquatic and riparian habitat.

III. Discussion – In stream Data Needs

Mad River Case Study

Dennis Halligan and Jay Stallman gave a powerpoint presentation describing a “Complimentary Management System”, the slides are now on the RVCOG website. Although there are acknowledged differences between the Mad River, as used in their case study, and the Applegate, Jay and Dennis were showing the scientific though process behind an approach of study, leading to a Schedule of Monitoring.

In general, the case study showed the studies needed to develop an Adaptive Management Strategy and to identify a Schedule of Monitoring that can be used as feedback to the strategy.

1. Sediment Transport Budget – including Historical Analyses of Channel Change using available information. On the Applegate would probably need pre-dam data.
2. Aerial Photography & Cross Sections – develop adaptive management strategy to determine how often to do these.
3. Limiting Habitat Factors Analysis

The monitoring schedule is then determined by the results of the Sediment Transport Budget and the Limiting Habitat Factors Analysis and focuses on identifying reaches where gravel mining can be determined to be appropriate or not.

The Aerial Photography & Cross Sections help specifically to create a reach by reach scale of what is limiting or providing for habitat.

Geomorphic Reconnaissance Level Assessment to Determine Vertical Channel Stability

Chuck Wheeler passed out the above document (two pages) to help explain the Federal permitting process and the phased, watershed level approach to determining whether a river is degrading, aggrading, or at equilibrium and whether or not a full sediment budget is warranted. Any instream projects will need to follow this process.

To help estimate the on cost for an Applegate Reconnaissance level (Phase I) assessment, the group used the Umpqua assessment cost of \$ 81,000. The group thought the Applegate would be somewhat less expensive. To help estimate the cost for a full sediment budget assessment on the Applegate, the group used the Chetco assessment cost of \$320,000. The group was undecided on whether the Applegate would be more or less expensive than that.

The Recon. Level Determination is a quick determination using existing information to determine if it is appropriate to even consider instream gravel removal in the river. If the channel is degrading, it is not appropriate. If the channel is aggrading, it's worth going forward with a full sediment budget analysis. In the past, USGS has been paid to complete these studies, but USGS' time has been overallocated and they may not be able to help with the Applegate. Chuck expects that in the future private consultants will have to be allowed to complete the studies to keep up with demand. The decision to allow consultants to prepare an assessment has to be made by administrators of Corps, USFWS and NMFS with input from state agencies (DSL, ODFW, DEQ, etc). If consultants were allowed, their work would at least need to be peer reviewed by the USGS or other agreed upon professional.

Discussion of three studies: Jay and Dennis consider the Reconnaissance Level Assessment to be comparable to #1 above, Historical Analyses of Channel Change, so approach is on target from their perspective.

Sediment Transport Budget, Stream Bed Elevation, Factors Affecting Fish Count (Limiting Factor Analysis, specific factors on reach by reach basis).

Needs: Army COE to help supply information on Historical Analysis. Tech team also find historical data. Some of the data below will be obtained in Fall, 2009 by USFS/Copeland/SOU*:

- *Grain size distribution
- Rate of filling bedload (report on website)
- Sediment Rate
- *Particle Size Distribution
- *Quality – Hardness, commercial value

Reference point: pre-date dam

Actions:

- √Army COE can supply bedload information.
- √Fall 2009 sampling will supply* information
- √Tech Team to explore finding other needed historical data
- √12 USGS Stations, have cross-section data from 1998, need to re-survey 12 locations, estimated \$5000, DOGAMI lead
- √√ Ian (USFS) can supply more field hands to conduct surveys, so cost may be even less. (NEED TO SCHEDULE)

Discussion/Questions:

Bryan was under the impression that the Federal agencies were not permitting any instream gravel operations and asked if it worth continuing discussions on "instream" extraction

-- NMFS – Chuck responded that extraction permits have been issued for Hunter Creek, Chetco River and the Lower Rogue River. The permitting just has to follow the sediment removal guidelines. Also, the information has to exist to make a determination of the state of the stream channel.

Are there other benefits to doing this sediment budget (either recon or higher level)? Would more than just gravel operators benefit? In other words, on the Mad and other rivers, there are several operators who pool resources to pay for studies. Who else may be interested in obtaining studies for the Applegate?

-- Group brainstorm of potential benefits:

- Culvert, Road, OHV, FEMA Flood Maps, Flood Insurance, Operating Dam, Water Quality, Restoration Work

How do we begin to pay for these studies and determine our priorities?

✓**Jeannell & Dennis** – will write technical assistance grant application to OWEB, others asked to match, etc.

Addendum. Sediment Yield from Army COE (Buck), Tech Team request,

Applegate & Lost Creek Reservoirs Anticipated Sediment Yield

The Applegate Lake drainage basin sediment yield was estimated to be 0.8 acre-feet per year per square mile. Based on this yield and a 3 percent trap efficiency, the report estimates the lake would retain a volume of 166 acre-feet of sediment per year.

The report on the May 1997 Survey of Applegate Lake showed a decrease of 6312 acre-feet storage over the 17 years that the project had been in operation up to that time. The 1997 estimate is far more than would be predicted using the original sedimentation rate. The 1997 report concluded that sedimentation had occurred in the lake but the amount may not be accurately quantified due to the different methods used to estimate the lake capacity. Also the report basically indicated that sedimentation would not likely occur at a constant rate.

The Lost Creek Lake drainage basin sediment yield was estimated to be 0.3 acre-feet per year per square mile, from the Lost Creek Lake DM 25 Lake Sediment Ranges. Based on this yield and a 95 percent trap efficiency, the report estimates the lake would retain a volume of 192 acre-feet of sediment per year.

Tech Team requests

- 1) identify existing data and, if necessary, data gaps ;
- 2) Identify questions that need to be answered and studies that can help answer them. For instream and active floodplain mining the first question could be "what is the vertical trend of the river?" If the answer is in equilibrium or aggrading, the second set of questions revolve around the sediment budget;
 - 2a) Identify questions and study needs relative to out of stream sources as necessary.
- 3) identify how to pay for those studies and who would do them,
- 4) And identify what to do with the results of the studies. Need to focus on a creating decision tree or contingency matrix. For instance: For instream and active floodplain, if the answer to the first question is degrading, then the evaluation needs to focus on other options.

In reference to the scope of the project, we did agree we're looking at the entire Applegate Watershed, not limited to the streams and their riparian corridors. Geoff Becker and Jack Shipley identified instream gravel above the dam as a possible aggregate source.

√Action: The concept of a learning or demonstration/restoration project may be discussed over the course of the Oregon Solutions process. We will work on clarifying what the goals and objectives would be of such project.

√Action: Judy Linton and/or Chuck Wheeler will provide this group with the list of documents that the USGS thought was important and what questions they thought were important to address, as well as the scope of work for the sediment transport study. We will post on the Oregon Solutions website.

√Action: A data group or technical team was set up to help the group progress on the evaluation of available data and data gaps. Basically the team will help us understand what we have, what we need, and what questions are we trying to answer. Members are: Chuck (chair), Ian, Geoff, Chip, Rich, Heather, Anita, Bill, Bob. We hope they can build a bibliography of resource information and help frame the project scope.