

**Bear River ECC
Final Meeting Notes¹
November 9, 2011
Pocatello, ID**

ECC Members Present

Mark Stenberg, PacifiCorp
 Cary Myler, U.S. Fish and Wildlife Service
 Corey Lyman, U.S. Forest Service
 David Teuscher, Idaho Department of Fish and Game
 Andrea Santarsiere, Greater Yellowstone Coalition
 Charlie Vincent, American Whitewater
 Lynn Van Every, Idaho Department of Environmental Quality
 Kirk Dahle, Trout Unlimited
 Kevin Lewis, Idaho Rivers United, by phone
 Dan Miller, National Park Service, by phone

Others Present

Kevin Colburn, American Whitewater
 Kelly Holt, PacifiCorp
 Joselin Matkins, Sagebrush Steppe Land Trust
 Greg Mladenka, Idaho Department of Environmental Quality

Commitments Made at the November 9, 2011 Meeting	
All	<ul style="list-style-type: none"> ECC members unable to attend the December 14 boater flow session: Consider assigning your proxy for voting.
Stenberg	<ul style="list-style-type: none"> Check with Baldwin about apparent spikes in flow graphs. Set date in 2012 to discuss criteria/standards for conservation easements and the ECC process for reviewing and approving them. Set meeting date for Oneida Fish Passage discussion. Obtain additional information on Henderson and Hardcastle proposals Update ECC documents on web site.
Teuscher	<ul style="list-style-type: none"> IDFG – Survey Gentile for native fish Contact Dept. of Water Resources about pond building adjacent to the Henderson easement. Prepare BCT broodstock report for Stenberg (February).
Mladenka	<ul style="list-style-type: none"> Sedimentation before and after boater flows.
Hugentobler	<ul style="list-style-type: none"> Draft calendar for 2012 grant project review Obtain photos for 2011 annual report – contact ECC members and Matkins Post final Land Management Plan to the ECC's web site. Update ECC documents on web site

¹ Some comments on the draft notes were not resolved by discussion at the December 2011 and January 2012 ECC meeting. It was decided to leave the draft notes as they stood with comments from David Teuscher, IDFG, intact.

Commitments Made at the November 9, 2011 Meeting	
Matkins	<ul style="list-style-type: none"> Speak to Cottonwood/Shingle Creek landowner about options for a conservation easement on their property (after general project discussion requested by Hoyt)
Action items in blue have been carried over from previous ECC meetings.	

Decisions Made at this Meeting

- Release annual stewardship funding in the amount of \$12,221.00 to Sagebrush Steppe Land Trust.

Decisions Made Via Email Since the Last ECC Meeting

None

Agenda Review

ECC members reviewed the day’s agenda. The decision on long-term stewardship funding for Deep Creek and approval of the revised Land Management Plan were tabled until the December meeting.

Action Item Review/Project Updates

ECC members reviewed action items from the August meeting. Stenberg reported that he had spoken with Stephen Smith about the **Nichols/Whiskey Creek** project and that a plan for that project is being prepared for presentation to the ECC. Stenberg said he had also spoken with a Natural Resources Conservation Service representative about the **Tingey** project. Work on that project may begin in the fall. Myler reported on work on the **Lower Cub**. He said he had hauled boulders at the project site for the past two days. Stenberg said he had gotten comments back on the Conservation Hatchery Funding agreement. Teuscher said he plans to have the Bonneville cutthroat trout (BCT) broodstock report complete in February. Lyman and Stenberg reported that the collection agreement for **BCT 10-Year Monitoring** was now complete. Lyman said he had contacted South Liberty Canal about the fish screen installed with funding from the ECC that was subsequently removed and replaced by the irrigation company. He said he had forwarded an email response from project proponent Wayne Beck to Stenberg and that the irrigation company had stated they would prefer to keep the structure as an asset for the time being but they may want to sell it in the future. Stenberg asked ECC members whether there was ECC interest in using the structure elsewhere, for example at Gentile. No action was taken.

2012 Grant Project Review Cycle

Stenberg asked Hugentobler to prepare a draft calendar for ECC review of 2012 grant projects. Van Every asked the ECC to consider reviewing habitat enhancement project proposals every other year rather than annually. Myler and Teuscher expressed support. Van Every suggested

that once Black Canyon boater flow discussions were complete, the ECC focus on geographic prioritization next, possibly early in the year. Stenberg noted that the group would need to revisit the license agreements to make this change, as they specify annual funding.

Whitewater Boater Flow Session #3

Stenberg said he has asked PacifiCorp legal how any changes to the Whitewater Boater Flow (WWBF) program should be documented. He has not yet received a response but wants to find out if any change would require amending the Settlement Agreement (SA). He said this would happen after the Federal Energy Regulatory Commission (FERC) reviewed the ECC decision, as they must approve it. Vincent read the SA language aloud and noted that any amendment must be unanimous. Teuscher said he does not believe the changes being discussed would amount to an amendment to the SA. Santarsiere agreed.

Review Results of Additional Data/ Analysis

The group discussed some of the issues that factored into the existing WWBF program and ranked tributaries to the Bear River within the project area on the white board (best to worst).

1. Cottonwood – some introgression (receives fishing use)
2. North and South Hoops – no introgression but a small population (no public use)
3. Kackley – fish trap at entrance makes this tributary very controllable. Can keep browns, rainbows out. Habitat good. (receives fishing use)
4. Trout/Whiskey (receives fishing use)
5. Williams, perhaps best potential, but currently has issues (low fishing use)
6. Harris Spring Creek/King/Alder – among the worst tributaries (no fishing use)

Stenberg asked where the Black Canyon would fit within these rankings. ~~Teuscher said he does not consider Black Canyon a tributary, he considers it mainstem. Teuscher brought up concerns about habitat and temperatures in the Black Canyon. A discussion of spawning potential in the Black Canyon followed. Colburn asked about water temperatures and location of suitable habitat for spawning. Teuscher said temperatures look suitable above reach 3. Van Every noted that the macroinvertebrate community in reach 3 indicates support of coldwater aquatic life macroinvertebrates that can support coldwater life are present in that area, and while the habitat is not optimal it is middling. Colburn asked where mud snails were present in the Black Canyon. Teuscher said Reach 4. Teuscher said he would support allowing hydropower to have the minimum stream flow, then take money from increased generation put it into stream improvement. He discussed an option of pumping cool, clean water from low in the Black Canyon to the upper reach, improving temperatures and water quality. He said this would put hydro operations back like they were previously. (0 cfs minimum stream flow released from Grace Dam – but doesn't know what pumping cost would be).~~ Colburn asked what the Black Canyon was like pre hydro project. ~~Teuscher said he believes it was BCT habitat.~~ Colburn asked whether there is really habitat for BCT when 3 or 4,000 cfs are running through. ~~Teuscher said no, but he thinks pre-European, it was cold water, and functioned as overwintering habitat.~~

Comment [A1]: Too much paraphrasing, clipping thoughts etc. I do not support any of the following statements as they do not reflect enough detail.

Comment [A2]: I was trying to make a point that our minimum flow is too hot in July and part of August to support cold water biota.

Comment [A3]: This was a convoluted discussion with many different ideas forwarded. I likely made several confusing statements, but I also believe that several thoughts here were not as they appear in the notes.

Stenberg asked how important the Black Canyon is as habitat compared to the tributaries listed above. In other words, where would the ECC get the best bang? Stenberg brought up a potential habitat enhancement project between reach 3 and 4 where a pipe may have rusted out under the river and additional flow could be captured in a small tributary.

Teuscher noted that overwintering habitat for BCT is limited as well and Black Canyon has this type of habitat. Colburn asked about spawning temperatures needed for BCT. The literature says spawning occurs on recession limb of flow, at 4 – 10°C, so June? ~~Teuscher said in the Blackfoot, the closest similar stream, spawning occurs in May.~~

Comment [A4]: No I did not. Spawning migration begin in May. Spawning occurs in late May early June.

~~Teuscher said six months out the year the Black Canyon is suitable only for fishes like redbside shiner and carp because of temperatures. If you were going to rank the 73 cfs minimum stream flow, he said, aesthetic value would be among the highest benefit.~~ Van Every said wildlife value also improved at that flow. Vincent noted that the fishing community had also advocated for flows. ~~Teuscher said they advocated for minimum flows not knowing what temperatures would result. Thermal imaging subsequently showed that temperatures were still very high and there has not been a lot of improvement to fisheries.~~ Colburn brought up the possibility of saving up water for a pulse flow in spring. He said this has been done elsewhere.

Comment [A5]: I do not support any of the text related to my name.

Stenberg said PacifiCorp has a limited ability to manipulate flows from Soda as it is a small reservoir. Van Every said he is intrigued by Colburn's concept: More water in the canyon for a month in spring, then some pulses on top of that. He said he believed this would move the sediment more gradually. The idea is not to go back down to base flows. He said IDEQ has been thinking of something similar to what Colburn is describing. Stenberg asked Van Every and Colburn to hold the thought for the alternatives discussion later in the meeting.

Colburn asked what the upper half of the Black Canyon was like prior to minimum flows. Teuscher said drier, with some pools.

Flow Data – Stenberg

Stenberg showed Black Canyon flow data provided by Baldwin as an overhead (Attachment 1) (These data were also provided to ECC members via email prior to the meeting).

Colburn noted that 96 hours of WWBFs were not what was negotiated, it was about 58 hours (or about nine days based on the average), but based on availability.

Stenberg reviewed boater use during 2011 WWBFs. He said use was an average of five boaters per forecast flow. Scheduled flows received about 60 boater uses. He said it appears there is more value to users for scheduled flows. Colburn said deviating from negotiated flows could impact the people most interested in using the resource.

The group reviewed the number of hours of flows above 200 cfs yearly between 1998 and 2011, as well as flows above 600 cfs and 700 cfs. Colburn noted that when turbidity spiked during the

1200 cfs flow, there had not been a big flow like that (i.e., that much water in the river) for over a decade.

While reviewing graphs of flows by month (see Attachment 1), ECC members asked about apparent spikes in the data. Stenberg will follow up with Baldwin and report back to the ECC at the December meeting. The group reviewed exceedance curves (Attachment 1).

The group discussed the making of flows and related issues downstream. A spreadsheet of flows was reviewed (Attachment 1), and the group discussed the timing of what happens at various points along the way in the Black Canyon.

Colburn said that at some point, these data should be put in context – i.e., what is going to happen? Stenberg mentioned waterfowl nesting, and said while he did not mean to minimize the impact of flows, it is inevitable that waterfowl nesting will be lost some years anyway.

Colburn said he was still not sure about the ecological significance of the April 2008, 1,200 cfs flow. The group reviewed the flow spreadsheet and graphs.

Vincent asked how early in the season PacifiCorp could tell whether boater flows would occur during spring runoff or during irrigation spills and flows could be tweaked. He said this information would be much more important if there were a move to scheduled flows.

Fish Data - Teuscher

Teuscher reviewed the data he compiled on fish and provided to ECC members via email prior to the meeting (Attachment 2). He presented a graph of length to weight ratios for longnose dace and noted that smaller fish were perhaps a little leaner under WWBFs. He also presented a table of percent changes in catch pre- and post-WWBFs. Colburn commented that there did not appear to be any red flags in the data shown, or at least nothing significantly adverse. Teuscher said there were more carp and also fewer species, neither of which is positive. The group discussed possible interpretations of the data. Teuscher said he wished this was not a 100-meter reach and that sample sizes weren't so small, so most of the data must be caveated based on that. He said in relation to size, longnose dace data were more reasonable to look at, as sample size for that species was larger. Also, he noted that it was not possible to look reliably at angler perception – a creel survey would have been valuable for that.

Teuscher said he thought it would be valuable to leave the 65 cfs for generation and use the money to pump cooler spring water up into the system. Stenberg asked Teuscher whether the discussion about minimum stream flow was tied to WWBFs or if it could be covered later. Teuscher said it was a separate issue.

Comment [A6]: Again, too much detail was left out. I do not support any of the statements made hear.

Macroinvertebrate Data – Mladenka

Mladenka reviewed the results of additional analysis of macroinvertebrate data. Graphs of the data were shown as an overhead (Attachment 3 – finalized by IDEQ based on updated information provided by EcoAnalysts on 12/15/11).

River Macroinvertebrate Index (RMI) – Mladenka compared single surber to composite samples. Van Every called attention to RMI values for the Bear River in Black Canyon. He noted that they are in as good a shape as any water in the region, including the Snake River. Santarsiere asked if fish would be affected similarly to macroinvertebrates. Mladenka said effects would be somewhat related. Van Every said there is a river fish index, but it is based on entirely different metrics.

Mladenka compared composite to single surber samples. He said they appear to tell the same story, so there were no surprises in the additional data.

Teuscher noted that the area with the worst bugs also showed best fish. He said it was interesting as it appeared that the lack of food was not keeping fish out. He said perhaps something else was keeping them out of other areas. Mladenka discussed a few variables. Teuscher said fish numbers may be low in reach 3 because of water temperatures. It was noted that 96 percent of spawning habitat is in reach 3 and above.

Mladenka said that in general, the Black Canyon does not support beneficial uses (IDEQ will verify this statement when the RMI is finalized based on the 12/15/2011 transmittal of updated information from EcoAnalysts). He noted that the middle two reaches probably do but they violate temperature standards.

Blackfoot/Bear River Flow Analysis – Colburn

Colburn reviewed flow analysis data provided to the ECC via email shortly after the October meeting (Attachment 3). He noted that the Bear River is about six times larger than the Blackfoot, so data should be interpreted relatively.

He said the data showed multiple peaks in a natural flow regime, including a pretty consistent early and late two-pulse system

When BCT are spawning, if they spawn in the Black Canyon, he asked, what they are keyed in to? Snowmelt regression. In June there is a period of abiotic stress that creatures anticipate.

A lot of people have said that a natural flow regime is good, he said, but we just don't have the water. Everything we are talking about is very different than a natural flow regime, he said.

Teuscher noted that the drop [in flows] is about half the peak, not back to baseline. He said there is not enough water available to truncate flows.

Colburn said that a three-month release is very different than a three-day release. We will all key in to some aspect of the natural flow regime that we like, he said, but there just is not water for higher flows. ECC members reviewed a graph of flow proposals versus the Bear River natural flow regime (2008 – 2011). Teuscher discussed anomalies over the past few years, such as low temperatures and very high water during 2011. Colburn said we could look at some other years

if that would be helpful.

Colburn said that in regard to WWBFs, we know some things about what we did but we don't have any data on new proposals, like a three-day flow. He said he would argue that it appeared to have resulted in no significant negative effects.

Mladenka clarified that with the data we have, we are not able to show significant negative effects.

Van Every brought up the concept of higher water levels with pulses. He said he thought that might help with turbidity but could have a detrimental effect on reach 3 by dewatering it during summer to supply the higher water levels earlier.

Colburn said as it stands, turbidity is bad for 1-2 hours, but then gets better. Would we then have 12 hours of turbidity?

Dahle said he wondered if frequency [of increased turbidity] is more important than magnitude – he said having more events of lower magnitude may be more damaging. He noted there is some support for this in the literature on the effects of storm water runoff.

Colburn said we have not seen catastrophic effects to fish or macroinvertebrates.

Dahle said he was concerned that multiple disturbance points could take things to a tipping point.

Mladenka said he was familiar with the paper on runoff. He said what he believed Colburn was saying was that we have not reached a tipping point. To clarify, in terms of what we measured, we have not exceeded the tipping point with peaks.

Stenberg said the group should bear in mind that the water in SA is for boater flows, not for ecological restoration. Teuscher said the SA called for 96 hours of boater flows and that the ECC agreed to study, then make a decision regarding WWBFs.

Stenberg said the question before the ECC is whether boater flows are producing significant, measureable, adverse effects.

Teuscher asked whether anyone disagreed that we are exceeding federal and state water quality standards every time we pulled the switch on boater flows.

Colburn said yes, but we need to find solutions that allow boating flows to continue. He said that if you were to devise a sediment control plan for the Black Canyon, it might look a lot like the boater flow program.

Stenberg showed the issues table prepared at the October ECC meeting. He asked how the ECC would like to proceed. He asked whether anyone was advocating for no boater flows. ECC members indicated they were not. He asked whether they would like to work towards some solution. Most indicated that they would.

Mladenka said he would like to see a solution that decreased the magnitude and duration of turbidity. He said he believed that sediment needs to be moved, but he would like to address associated turbidity concerns.

Colburn said that in looking at 2011 data, it appears we are there. Turbidity has been better every year and other than the first flow every year, he believes that turbidity concerns may be addressed within a couple of years. He asked Teuscher if he is concerned about sediment in the stream. Teuscher said yes, that is why he is not opposing boater flows. He said he thinks they should take place in May.

Stenberg said it appeared that turbidity is the only documented measured significant adverse effect and suggested going back to the literature to interpret the effects. Vincent said that the literature does not exist to show this is a significant adverse effect, so we can't agree that turbidity is causing significant adverse effects. Mladenka said it is clear that we are exceeding turbidity standards, but the standard is not an end-all, be-all. Teuscher said that if the literature shows effects, that's still data. Colburn said if data is similar yes, but significant adverse effects are not being shown in the river itself. Mladenka said while turbidity is a significant adverse effect, it's also a significant positive effect. He said he is not trying to put it on a scale, he would just like to reduce the turbidity a little and would like to address that, maybe not all at once. He suggested that flows be managed for turbidity, as the group has lots of data for that.

Stenberg asked if all agreed we are exceeding turbidity standards during WWBFs. ECC members agreed. Colburn added that all would agree that high turbidity is bad for fish. Stenberg noted some disagreement on interpretation of effects in the literature.

Mladenka reviewed graphs of turbidity data (total suspended solids) during WWBF events.

PacifiCorp Alternative

Stenberg verbally presented a draft alternative prepared by PacifiCorp. The alternative proposes to start the season with a three-day boater event, probably over a Friday, Saturday and Sunday, with different cfs of flows each day released from Soda, first day at 600 cfs, second at 800 cfs and the last day at 1,000 cfs. Flows would be kept at about 400 cfs during the two nights. Flows would be scheduled to increase the probability that they would be used by boaters. Some limited camping would be allowed (it currently is not). There would be a truncated season, through June. Based on use (if recreation demand is high), another scheduled weekend may be added, perhaps consisting of two 900 cfs flows. PacifiCorp is proposing a boater season of April 1 – June 30.

Colburn asked whether the alternative was based on measureable significant adverse effects of turbidity. Stenberg said he did not want to weigh in on that.

Stenberg said another proposal would be the SA program with a shortened season, April 1 through June 30, with 16 forecasted flows (Same as SA, but taking two weeks off the end). He reminded everyone that American Whitewater voluntarily excluded Memorial Day and Idaho Free Fishing Day from the schedule, but they are under no obligation to continue to do so. Teuscher was asked when a good time for a three-day event would be. Teuscher said in May rather than June.

Stenberg asked ECC members to give potential alternatives some thought, and to feel free to come up with other ideas. The group will continue discussions with the goal of reaching resolution on December 14.

American Whitewater Alternative - Colburn

Colburn presented an alternative proposed by American Whitewater (Attachment 4). The proposal calls for nine weekend days of WWBFs, average of SA, same timeframe as the SA.

The group also discussed using maintenance outages to make boater flows.

Colburn asked about the number of hours of WWBFs in PacifiCorp's proposal and asked that the group revisit the topic. He said he believed 54 hours is the average of what was negotiated, that it seemed fair to schedule 54, not to exceed 96.

Lyman said it would be valuable to have Baldwin present for the next discussion. Stenberg said Baldwin was planning to attend.

Adjourn

Attachments

Attachment 1: Grace Hydrograph, Grace Exceedance Curves and Flow Below Grace Dam Threshold Tables (provided by Baldwin, available upon request)

Attachment 2: Fish Data (provided by Teuscher, available upon request)

Attachment 3: Macroinvertebrate and TSS Data (provided by Mladenka, available upon request)

Attachment 4: Alternative Proposal by American Whitewater (provided by Vincent and Colburn, available upon request)