

**Final Notes**  
**Bear River Environmental Coordination Committee**  
**Subgroup Meeting: Boater Flow Ramp Rates in Black Canyon**  
**May 15, 2007**  
**Grace, Idaho**

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**ECC Members Present**

Mark Stenberg - PacifiCorp  
Eve Davies - PacifiCorp  
Lynn Van Every – Idaho Department of Environmental Quality  
Jim Capurso – U.S. Forest Service  
Warren Colyer – Trout Unlimited  
Dave Tuescher – Idaho Department of Fish and Game

**Participating by Phone**

Charlie Vincent – American Whitewater  
Mary Lucachick – Idaho Department of Parks and Recreation  
Susan Rosebrough – National Park Service  
Connely Baldwin - PacifiCorp

**Others Present**

Kelly Holt - PacifiCorp  
Luca Adelfio – Trout Unlimited

Stenberg welcomed ECC members and asked whether anyone had additional agenda items.

**Agenda Items:**

- Capurso's proposal – sent to ECC members prior to today's meeting (see Attachment 1)
- Ramping rate question
- Article 419
- Settlement Agreement section (similar to Article 419)
- Fish Minimization Stranding Plan
- PacifiCorp proposal – sent to ECC members prior to today's meeting (see Attachment 2)

**Capurso Proposal**

Capurso said he does not want to change the playing field with his proposal and that he respects what the whitewater enthusiasts accomplished in the Settlement Agreement negotiations. He suggested combining whitewater flows to simulate normative river flows to benefit the river ecosystem and in a similar fashion as in the South Fork of the Snake River. Whitewater enthusiasts could still experience high flows, but the river ecosystem would also benefit.

Capurso said he had sent an email to Vincent stating this, to see how Vincent and his group felt about this possibility.

Vincent said he spoke with his constituents and was encouraged to follow the plan in the Settlement Agreement, which includes studies and analysis of the effects of whitewater flows (Article 419). He said

he feels it would be premature to deviate from that plan, as there are no data upon which to base departure from the plan.

Lucachick said she spoke with Vincent and Council. She said she would like to give what is in the Settlement Agreement a chance to measure impact of boater flows. She also noted that she was familiar with the South Fork Snake work and that the flow regime present here [Bear] was not similar to that on the Snake, and may potentially not be able to provide the benefits Capurso described.

Rosebrough said she supports Lucachick and Vincent. She said she knows a lot of work went into the Settlement Agreement and thought it best to move forward with testing etc. before moving away from the Settlement Agreement proposal.

Teuscher said he doesn't see how Capurso's proposal contradicts the Settlement Agreement. He noted that there would still be monitoring under Capurso's proposal. He noted that flows would be used less by boaters because some of the flows would occur at night.

Van Every said he did not see the proposal as a contradiction.

Teuscher said that flows would be on and off, but there would be no less opportunity for whitewater enthusiasts.

Vincent said it could create unsafe conditions for boating – at night. He asked for a reading of the Settlement Agreement language.

Lucachick read the relevant Settlement Agreement section aloud to the group. It was agreed that it would contradict the license to alter flows according to Capurso's proposal.

Van Every asked what a deviation from the Settlement Agreement would involve.

Stenberg said the ECC would need to create an amendment to the Settlement Agreement and submit it to the FERC for their approval and an Order incorporating it into the license.

Van Every said he feels the ECC could amend the license at some point, if necessary.

Capurso said he believed there were misunderstandings regarding his proposal. He said he was identifying an opportunity: Put high flows down in a certain way, at a certain time, and there would be restoration benefits. He said this could benefit both whitewater enthusiasts and restoration.

Rosebrough said she was concerned that the proposal would limit the whitewater opportunities previously agreed upon.

Van Every said he understood Capurso's proposal and thinks it is a good one, but that an amendment to the Settlement Agreement would be needed first.

Lucachick said she would like to give what has been agreed upon a chance to work first. She said she would not support amending the Settlement Agreement.

Colyer said that after the six years of study, the ECC could better decide how to go forward with the boater flows.

Vincent said all beneficial uses must be considered and he did not see the logic of what is being proposed.

Lucachick noted that all kinds of events currently happen on the Bear—things entirely out of the ECC’s control that may have a big effect on the river. She said the ECC does not have a handle on everything that happens on the river and doesn’t know that the planned boater flow program is bad for fisheries.

Capurso said he feels there may be some confusion about the proposal. He said it has nothing to do with potential effects of whitewater flows. Rather, it would provide ecological benefits while whitewater enthusiasts enjoy high flows. In the interest of the group’s time, he said he would be OK deferring the conversation and proposal for a couple years.

Stenberg summarized: Capurso made a proposal to group the flows into more of a spring runoff hydrograph – listing benefits to native fishes, streambed sediment transport, streambanks, and a more normal flow regime. Vincent, Lucachick, and Rosebrough want to stick with the Settlement Agreement’s schedule of releases (i.e., continue with Black Canyon Monitoring during whitewater flow releases), then sit down and talk about the results once monitoring and data analysis over the six years is complete. Stenberg said the ECC will probably vote on this issue in four years, when the data are in.

The subgroup agreed.

### **PacifiCorp Proposal for Ramping Rates**

Stenberg emailed PacifiCorp’s proposal (Attachment 2) in advance of the meeting.

Stenberg said PacifiCorp’s interests are in generating power and serving customers in a cost-effective manner while supporting the interests they share with the ECC including native fish restoration, habitat enhancement and water quality improvements. He said the PacifiCorp team has developed an interest-based proposal for the ECC’s review and discussion. Stenberg provided additional background on the proposal. He noted that the proposal includes implementation and expansion of the existing fish stranding minimization plan and stage change measurement with staff gages. He encouraged ECC members to participate in implementation of the Fish Stranding Minimization Plan in 2008 if they would like. He said emphasis was placed in the Fish Stranding Minimization Plan on the quarter-mile stretch of river at the top of the reach and native fish and that gives him an indication of the ECCs priorities at the time the plan was written. Stenberg noted that it is not currently known what ramp rates would cause a fish stranding problem so he is proposing that we use the standard shut down and start up sequence for the Grace Plant in 2008 and gather empirical information about the effects of those ramp rates and use that information to make future adjustments.

Expansion to fish stranding would include areas 50 feet above and below staff gages placed mid canyon and at the takeout. Stenberg also described additional water quality data that could be gathered and funded from surplus Black Canyon Monitoring funds and would cost about \$1200/day. He proposed that studies continue through 2008 during scheduled releases to gather background. The purpose would be to get a full, year-round picture. He invited comments from the group.

Capurso asked whether fish stranding procedures have (Fish Stranding Minimization Plan) already been implemented.

Davies said yes, but she was not able to be on site during the first whitewater release and we kind of boggled it. She said she had communicated with operators, who said they rescued fish from the margins on the assumption they would be stranded but did not wait for them to become stranded. These fish included small fish, probably shiners and dace. She said workers moved any fish found along the margins

rather than waiting to check for stranding and fish mortality, so the first run wasn't a good opportunity for data collection or an indication of whether fish would have actually been stranded.

Stenberg said more effort will be focused on fish stranding next year, including having more people on site, identifying the fish that are stranded, waiting for them to become stranded, etc.

Vincent said he had spoken with American Whitewater's fisheries representative on the Feather River, who said that if banks on that river exceed 8 percent, no fish stranding occurred. He said those data may be useful in determining where to focus efforts on the Bear.

Stenberg discussed how the flows will change in the river during plant shut down and start up following normal procedures. (see Attachment 3- Diagram)

Teuscher asked whether Stenberg could provide ramping data in inches per hour for the one opportunistic release. Stenberg said yes, but it would not be very meaningful. Holt clarified that the first part of the diagram and associated discussion was in regard to upramp. Stenberg said the discussion was about the effects on our shared interests and measuring those under real conditions and he did not want to get focused on the perceptions of a ramping number at this time. Teuscher noted that this is a very complex issue.

Stenberg asked the group to consider supporting the company—which supports the ECC's interests— and support what is in the interest of the company (standard shut down and start up) as a starting point for the analysis of ramp rates in 2008.

There were questions from the group about how to separate the effect of ramp rates from the boater flow.

Capurso said he was still waiting for ramp rate of the opportunistic flow. Stenberg asked what the number would mean to him. Stenberg said the associated effects on fish or stranding were not known and that he was trying to make a point about not getting hung up on a number.

Van Every said numbers may be meaningful based on data from elsewhere.

Stenberg said he doesn't want to get hung up on hypotheticals. He said, in an interest-based manner he is proposing more work with staff gages, fish stranding and water quality to base our future ramp rates on actual findings. He said that conditions in Bear are unique.

Baldwin checked ramping data from last year's whitewater flow downramp, May 18, 2005: 1.17 feet total downramp and went to 194 CFS (from 874 CFS).

Stenberg called for a check-in with the group on the following question: In concept – do we have support for the PacifiCorp proposal given more detail later? Capurso asked whether that was with the specific flows listed. Stenberg said yes.

Vincent: Conceptually, it's a good plan. He said he doesn't yet know if it's good for the resource.

Lucachick - OK conceptually.

Rosebrough: Concerned about how to determine the impact of ramp rate vs. whitewater flow. She said she is OK with moving forward to see how it works.

Van Every: OK with concept.

Colyer: OK with concept and wants to give PacifiCorp the benefit of the doubt and investigate their interest as a starting point.

Teuscher: Appreciates the need to look into ramping rates more. He said the ECC may come up with an alternate proposal for ramping rates.

Capurso: Although he appreciates PacifiCorp's attempt at proposing a starting point, he does not support the concept or the method of funding proposed. He said that typically ramping rates are in inches per hour, not feet per hour. The location where the flows would be measured is a relatively unconfined river segment, further supporting the need for less of a steep ramp.

Vincent asked for an explanation of the purpose of ramping rates.

Stenberg said they allow fish time to find their way back into the channel.

Colyer added that not just fish benefit, but also rocks, etc. He said basically, it is an effort to try and normalize flow increase and decrease as much as possible.

Stenberg noted that some say there is no impact associated with upramp. He said he does not feel confident that the group can use information on ramp rates from other areas. He reminded the group about the papers Gangemi gathered and distributed to the ECC. Stenberg said he thinks the group should gather its own data in the field and make its own decisions. He said he believes the necessary data could easily be gathered in one season. In regard to PacifiCorp's proposal, he said he is not saying we'll stay here, but that we'll start here and gather more data as needed. He said PacifiCorp has a public trust to provide low cost power to its customers.

Capurso said he agrees, but doesn't want to work in a vacuum. He asked why reinvent the wheel when we only need to perfect the wheel? Why would we want to disregard other information that is available?

Tuescher asked to review the timeline. Stenberg said whitewater flows begin next year. Test flow rates need to be agreed upon by the time of first boater flows. He said he doesn't think ramp rates and boater flows are a FERC issue. He said according to the Settlement Agreement, flows are to be determined by the ECC in consultation with PacifiCorp. He said this will be reported to the FERC in the ECC's annual report, but he is not sure it needs to be part of the license.

Capurso said that at some point he would like to address the monitoring funding question. He said he doesn't understand why ECC money should be used to monitor a ramping rate that is clearly financially beneficial to PacifiCorp.

Stenberg said that we need to keep working on this and if the group can't work this out before the start of whitewater flows and the issue goes into dispute resolution with the policy makers, he is not sure what will happen with 2008 whitewater boater flows.

Vincent summarized remaining points from his consultation with American Whitewater representatives, including an instance on a river where flow was abruptly stopped because of a boater fatality and no stranded fish were found. He also asked about historical flow rates, prior to development. He said diurnal flows at that time could possibly have approached 40 percent – but he is not sure about the availability of historical flow data. He also suggested looking at the magnitude of fish stranding. He said that on the Feather River, data showed that the stranding rate was roughly equal to one fish's yearly spawning. Also bug density appeared largely independent of flow rates.

Teuscher asked whether there were any examples of recreation flows that increased base flow by an order of magnitude. Vincent said he believed that was the case on the North Fork of the Feather River.

PacifiCorp Compliance Analyst, Frank Edelman entered the meeting and was introduced by Stenberg.

Stenberg called for proposed next steps.

### **Next Steps**

Stenberg asked Capurso and Teuscher for input – because they did not support PacifiCorp’s concept at the table and would we expect a proposal from them to review.

Capurso said he would be at the next meeting and that he needed more time to get up to speed on previous work.

Teuscher said he needed more time to look at the proposal and to review more literature before he could propose an alternative. He said that it sounded like the group had enough time to do that by/before the next ECC meeting [June 27<sup>th</sup>]. He said he does not know whether IDFG will develop an alternative proposal on their own, or with other ECC members.

Stenberg noted that at the April ECC meeting, people said they needed more time to get up on the issues, and asked whether they had a chance to do so.

Capurso said he thought the information provided by Gangemi was excellent. Van Every said he had spent some time on it, but not nearly enough time to dig into them.

Stenberg called for suggestions on how to move forward.

Van Every noted that it is difficult to know what Black Canyon is like unless you go there, and it is very difficult to access. He noted that there are spots that are likely areas for concern for fish stranding and suggested concentrating on those areas. He said he could put together photos of those areas and map them, so that everyone doesn’t have to climb down into Black Canyon. He said he would do that for the next meeting or two.

The group will continue discussions at the next regular ECC meeting (June 27), reserving half a day for this topic.

Capurso suggested taking some time on the phone prior to the next meeting to possibly develop a counter proposal.

Davies invited ECC members to check on reclamation efforts at the Cove decommissioning site. She said results have been impressive and that willow bundles are sprouting.

Meeting adjourned.

**Attachment 1: Capurso's Proposal**

**Date:** Thu, 10 May 2007 08:09:10 -0400 [05/10/2007 06:09:10 AM MDT]

**From:** James Capurso <[jcapurso@fs.fed.us](mailto:jcapurso@fs.fed.us)>

**To:** [Mark.Stenberg@PacifiCorp.com](mailto:Mark.Stenberg@PacifiCorp.com), **Cc:** [jmende@idfg.idaho.gov](mailto:jmende@idfg.idaho.gov), [kevin@idahorivers.org](mailto:kevin@idahorivers.org), [Lynn.Vanevery@deq.idaho.gov](mailto:Lynn.Vanevery@deq.idaho.gov), [mhoyt@greateryellowstone.org](mailto:mhoyt@greateryellowstone.org), [mlucachi@idpr.state.id.us](mailto:mlucachi@idpr.state.id.us), [yazoo@xmission.com](mailto:yazoo@xmission.com), [Mark.Stenberg@PacifiCorp.com](mailto:Mark.Stenberg@PacifiCorp.com), [Susan\\_Rosebrough@nps.gov](mailto:Susan_Rosebrough@nps.gov), [dteuscher@idfg.idaho.gov](mailto:dteuscher@idfg.idaho.gov), [wcolyer@tu.org](mailto:wcolyer@tu.org)

**Subject:** Ramping Flows Discussion

I noticed the location of Tuesday's ramping flows meeting will be in Grace. Teuscher and I have a meeting in Poky at 1:00 with some folks from his Boise Office, so I wonder how long you expect the ramping meeting will be? I want to participate in it as much of it as I can, but will probably have to leave Grace by noon.

I know I immediately received many reasons at the last ECC meeting why consolidating the scheduled whitewater flows to simulate peak river flows was IMPOSSIBLE, that situation reminded me of the same responses we heard when we initiated discussion of normative river flows in the South Fork Snake River, which we are now implementing for the benefit of the river ecosystem. I see such flows as a win-win situation where the whitewater enthusiasts get mega-flows, the river has a simulated peak hydrograph, and PacifiCorp would have to manipulate flows less frequently. Since Charlie said at the last ECC meeting he would be willing to discuss the possibility of creating a red number day type mega flow, I would like to propose part of the meeting to further discuss this. If this discussion is OK with you, could you please touch base with the appropriate folks in your management to determine level of support? Charlie, would it be possible for you to call a few folks in your organization to discuss also?

I think returning normative high flows to this segment of the Bear River would go a long ways in restoring the river ecosystem, including negatively affecting non-native fish, benefiting native fish, and improving river substrate, so I would appreciate your consideration on this issue.

Thanks  
jim

**Attachment 2: PacifiCorp's Proposal**

## Concept

PacifiCorp wants to put forward the following proposal for discussion concerning the determination of a “ramp rate” for Black Canyon whitewater boater flows. As we do not know the effects of following our current shut down and restart procedures for the Grace Plant we are proposing to follow them as a starting point for establishing a boater flow ramp rate and determining the effects of these ramps.

In 2008, for scheduled whitewater events we propose the following, implement the approved Fish Stranding and Minimization Plan, gather water quality data at the discretion of the ECC using surplus Black Canyon monitoring funds, measure stage change on up-ramp and down-ramp at key locations while allowing PacifiCorp to bring generating units back on line as per our normal operating procedure timeline.

The goal of this approach is to test for effects of down-ramping (stranding of native fish) per our normal unit start up procedure, measure stage change on up-ramp and down-ramp and potentially gather additional water quality information related to the boater flow release events. I feel this will allow us the ability to make informed decisions concerning appropriate ramp rates and move forward in an interest based fashion recognizing all the beneficial uses of the river.

Note: The accumulative effects of boater flows and their associated ramp rates will be monitored and evaluated in the Black Canyon Monitoring Study including macrophytes, periphyton, substrate, benthic macroinvertebrates, fish species and density.

## Fish Stranding Minimization Plan:

PacifiCorp will implement the approved fish stranding minimization plan after each whitewater event in 2008 and into future years if fish stranding is occurring after scheduled white water releases. PacifiCorp will fund this effort under the requirement to implement the fish stranding plan. Per the plan, during the first year of scheduled releases, PacifiCorp staff will survey the ¼ mile reach below the Grace Dam and forebay to detect whether fish stranding has occurred. If fish stranding is occurring due to these releases PacifiCorp will continue to survey and salvage fish following scheduled releases. Per the fish stranding minimization plan, consultation with IDFG will develop procedures for salvaging and returning any native stranded fish to the Bear River. PacifiCorp proposes to expand this Plan for one year during the 2008 whitewater releases to include 50 ft above and below the locations of staff gages used to measure stage change (described at end of this memo). Full text of the Fish Stranding Minimization Plan is in the Implementation Plan.

## Water Quality Measurement

If the ECC wishes to measure water quality parameters during the whitewater events we could use our existing contractor working on the Grace Cove Water Quality Monitoring to measure the same parameters using the same locations GC02 and GC03 described in the Grace/Cove Water Quality Monitoring Plan. The scheduled boater flows are outside the July, August and September window when our contractor will be performing continuous water quality monitoring so the probes will not be in place during most of the period for the scheduled releases. If the ECC chooses, we can fund water quality monitoring from the surplus in the Black Canyon Monitoring Fund or other ECC funds. Each time we collect data during a boater event the cost will include one day for staff time and equipment to perform the monitoring and some office and lab time to process samples and summarize the data.

If funded by the ECC with surplus Black Canyon Monitoring Funds, the monitoring could be accomplished using our YSI Model 6920 probes at the two monitoring sites measuring the following parameters.

- Dissolved Oxygen (mg O<sub>2</sub>/L and % saturation)
- Specific Conductance (umhos/cm)
- Turbidity (NTU)
- Temperature (C)

Instantaneous sampling (grab samples) could be done during the event also. The following parameters are sampled during our annual Grace/Cove Water Quality Monitoring efforts and could be sampled:

- Total Phosphorus (mg P/L)
- Orthosphosphorus (mg P/L)
- Ammonia (mg N/L)
- nitrate (mg N/L)
- nitrite (mg N/L)
- total suspended solids (mg/L); and
- turbidity (NTU)

#### Stage Change

If determined beneficial through consultation with the ECC, PacifiCorp will set up staff gages at the highway bridge by Grace Dam, mid-point in Black Canyon at Turner Bridge and at the Black Canyon Take Out. The staff gages will measure stage change throughout an entire event.

**Attachment 3: Grace Plant Shut Down and Startup Flows**

Boater Flow In CFS

