



State of Idaho  
**DEPARTMENT OF WATER RESOURCES**

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C. L. "BUTCH" OTTER  
Governor  
DAVID R. TUTHILL, JR.  
Director

JANUARY 30, 2008

**VIA EMAIL**

HANS L. CARSTENSEN  
P.O. BOX 4846  
POCATELLO, ID 83205

**RE: MEASURING DEVICES FOR S-41 AND S-42 IN WD170**

Dear Hans:

This letter is a follow up to our phone conversation of January 28, 2008, during which you indicated that the permitting process with the US Forest Service (USFS) requires a written response to your email of October 27, 2007. In that email, you described plans for measuring devices for two diversions from the Salmon River in Water District No. 170 and indicated your desire to forward the plans to a fabricator as soon as possible. As the flumes meet the IDWR specifications, I telephoned you shortly after receiving the email and provided a verbal approval and indicated I would provide a written approval at a later date. This letter provides that written approval.

During our telephone conversation this week you indicated that the flumes have been manufactured and are ready to be installed. I understand the schedule for installing the flumes depends in part on approval by the USFS. Please contact me if it appears that the flumes will not be installed by the start of the irrigation season on May 1, 2008.

After the flumes have been installed, the as-built dimensions should be provided to Mr. Brain Hamilton and he can generate rating curves for the flumes. I believe Mr. Hamilton can also provide staff gages or either the standard or direct-read type.

For the 2008 irrigation season, the users on the two ditches will periodically read the staff gage and maintain a report to be submitted to the Water District No. 170 Watermaster. I will contact you prior to the start of the irrigation season to discuss the measurement and reporting for 2008 and to provide a report form.

If you have any other questions, or if I can be of further assistance, please feel free to call or write me.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Nick Miller', is written over a light blue rectangular background.

Nick Miller, P.E.  
Staff Engineer, IDWR  
Watermaster, Water District No. 170

## Miller, Nick

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**From:** Miller, Nick  
**Sent:** Wednesday, January 30, 2008 10:16 AM  
**To:** 'Hans Carstensen'  
**Subject:** RE: Measurement Devices

**Attachments:** 013008\_Carstensen.pdf



013008\_Carstensen.pdf (51 KB)

Hi Hans,

I've attached an approval letter as we discussed on Monday. Let me know if you have any questions.

Nick.

-----Original Message-----

From: Hans Carstensen [mailto:carsthliii@worldnet.att.net]  
Sent: Saturday, October 27, 2007 3:35 PM  
To: Miller, Nick  
Cc: Brian Hamilton  
Subject: FW: Measurement Devices

Hi Nick,

Thanks very much for returning my call the other day. I greatly appreciate your assistance in this matter.

As promised, accompanying this message is the recent message from Brian Hamilton along with the drawings for the two measurement devices.

I would be grateful if you would let me know at your earliest convenience if these drawings will meet the IDWR requirements for the S-41 and S-42 diversions off the Salmon River. Once I hear back from you, I will proceed to get these drawings into the hands of a competent fabricator.

I look forward to hearing from you.

Kind regards,

Hans

-----Original Message-----

From: Brian Hamilton [mailto:bhamilton@pn.usbr.gov]  
Sent: Thursday, October 18, 2007 4:43 PM  
To: carsthliii@worldnet.att.net  
Cc: wmbaker@custertel.net  
Subject: RE: Measurement Devices

Hans -

attached are drawings for measuring devices for the S-41 and S-42 diversions. I thought I had the 2 splitter designs for you also, but as I went through your file those drawings haven't come back from Boise yet. My draftsman is out today, so I thought I'd just send you these 2 as I'm going to be out for a few weeks on a Grand Canyon Float. Both of these structures are ramp flumes, probably would be best to make from steel. The other 2 measuring devices for the splitters are also ramp flumes, just smaller. I

will also mail you a hard copy of the drawings.

S-41 would need to be installed about 40 yards downstream from the headgate, which is above the fish screen. Allowances would need to be made to credit you with about 0.8 cfs for the fish screen bypass.

S-42 would need to be installed about 50 yards downstream from the fish screen. The willows growing into the ditch from the fish screen downstream 100 yards should be trimmed out of the ditch to allow this structure to function correctly.

I have talked with Nick Miller from IDWR briefly about both of these measuring devices, and believe he is ok with the concept. You will need to send IDWR a copy of the drawing and a description of the proposed location (similar to what I've listed above), to get formal approval.

SNRA also wanted to see a copy of this information for a special use permit.

Any questions about the drawings, please give me a call. I will be out of cell range from 10/23 to 11/11. I will give you a flow table for these structures based on the as-built dimensions. If you'd like, I can try to come up when you install. I can also provide staff gages for these structures.

Thanks - BH

Brian Hamilton  
US Bureau of Reclamation  
102 S Warpath  
Salmon ID 83467  
208-756-1064  
208-756-7431 cell

>>> "Hans Carstensen" <carsthliii@worldnet.att.net> 08/26/07 9:50 AM >>>  
Hi Brian,

Just checking in to see how things are going on the measurement devices.

Terry told me that you were kind enough to come by and introduce yourself when you were up here several weeks ago. Thanks for letting her know who you were and what you were up to. She was pleased to meet you and she joins me in expressing appreciation for your assistance with this project.

Regards,

Hans Carstensen

-----Original Message-----

From: Brian Hamilton [mailto:bhamilton@pn.usbr.gov]  
Sent: Monday, July 02, 2007 10:43 AM  
To: carsthliii@worldnet.att.net  
Subject: Re: Measurement Devices

Hans - yes I did meet with Marc and looked at the 2 main ditches (S-41 and S-42) and the 2 places where the ditches split and come onto your property. I got some measurements that day and the next, but kind of overscheduled myself and didn't get everything I need. I am just on my way out the door to go back up to Stanley today, and will be up there Friday also and hopefully get all the measurements for your 4 spots on one of those 2 days. I will give Marc a call on my way up or stop by when I'm up there to let him know what's going on. As far as the next step, I'll hopefully knock out a proposed solution for you next week, and then we'll need to talk about whether that's the way you want to go, and then get your permits rolling with SNRA as well as IDWR's approval. Please call or email me if you haven't heard from me by the end of next week (7/13).  
Thanks - BH

>>> "Hans Carstensen" <carsthliii@worldnet.att.net> 06/29/07 5:54 AM >>>  
Hi Brian,

I write to confirm my understanding based on conversations with our ranch foreman, Marc Kottraba, that you have met with Marc and visited the two ditches that irrigate our ranch in the Sawtooth Valley near Obsidian, Idaho. Marc has told me that the next steps in the process are for you to shoot the grades on the ditches and begin the process of designing the needed devices.

In my earlier e-mail message to you of several weeks ago, I requested your assistance in measuring for and designing two additional and similar measuring devices for the ditches as, or just before they enter my property. Marc confirmed that you had discussed these with him, but I am uncertain as to the next steps for these.

I know that you are extremely busy with such projects for other ranchers over a wide area. As a result, I would ask only that you confirm the foregoing understandings by return e-mail message at your earliest convenience, and outline your recommended next steps for the second two devices.

In addition, please feel free to contact me by return e-mail or by cell phone at 617-827-7087 if you require anything from me with regard to these projects.

Thanks again for your assistance.

Kind regards,

Hans Carstensen