AGENDA
STREAMFLOW ENHANCEMENT AND MINIMUM
STREAMFLOW COMMITTEE
MEETING NO. 1-14
January 10, 2014 at 1:00 pm
Idaho Water Center
Members May Participate by Phone
Conference Rooms 602 C & D
322 East Front St, Boise, ID 83702

1. Introductions
2. Transactions Review & Recommendations
   a. Salmon River Basin: Morgan Creek
   b. Teton River Basin
      i. South Leigh Creek (Osagia LLC)
      ii. South Leigh Creek (Burr)
      iii. Badger Creek
3. Public Comment

Committee Members: Peter Van Der Meulen (Chairman), Roger Chase (Acting Chairman), Vince Alberdi, Bob Graham

Americans with Disabilities
The meeting will be held in facilities that meet the accessibility requirements of the Americans with Disabilities Act. If you require special accommodations to attend, participate in, or understand the meeting, please make advance arrangements by contacting Department staff by email Mandi.Pearson@idwr.idaho.gov or by phone at (208) 287-4800.

322 East Front Street, Boise, Idaho 83720    Tel: (208) 287-4800    Fax: (208) 287-6700
Memorandum

To: IWRB – Streamflow Enhancement and Minimum Streamflow Committee
From: Morgan Case
Date: January 10, 2014
Re: Water Transactions Program – 2014 Morgan Creek Transaction

The 2004 Snake River Water Rights (“Nez Perce”) Agreement commits the state to providing incentives for improving fish habitat which includes improving or protecting flow conditions to augment stream flows. Morgan Creek, a tributary to the Salmon River near Challis, is important for the spawning, migration and rearing of ESA-listed steelhead and bull trout. It also supports the rearing of ESA-listed juvenile Chinook salmon. Morgan Creek typically becomes dewatered below the lowest two diversions (SMC 2-4 and SMC 1) during the irrigation season, blocking access to those fish species. For the past eight years, the IWRB has held agreements not to divert with the two water users on those diversions from Morgan Creek. Rather than divert from Morgan Creek, they left at least 2 cfs in the creek during the low flow periods to maintain adequate flows in Morgan Creek to the confluence with the Salmon River. The water was instead pumped out of a Salmon River ditch that carries existing Salmon River water rights appurtenant to the same ground. In return, the irrigators were compensated based on the cost of pumping water from the Salmon River ditch.

While the agreements have sustained a minimum flow over the past 8 years, the approach to flow restoration over that time has changed. Instead of addressing only flow limitations, Board staff works with Upper Salmon Basin partners to develop transactions that can complement projects addressing all limiting factors, while maintaining the local economy. Morgan Creek has been a back burner the last 5 years, while work has focused on the Lemhi and Pahsimeroi River Basins. Staff proposes taking a fresh look at the opportunity for meaningful flow restoration in Morgan Creek over the next year. In the mean time, it is important to secure the gains that have already been made.

The water users have expressed a willingness to develop another long-term flow restoration transaction and have agreed to enter into a one-year agreement not to divert while those discussions are underway. The proposed one-year agreement would be an extension of the same terms and pricing structure of the previous 5-year agreement. The Morgan Creek water users will be compensated only when they are required to pump to maintain the 2 cfs flow. The maximum payment is based upon a five percent increase from the 2013 payment, with the total not to exceed $8,000.

Action Item:
There is funding opportunity through the Bonneville Power Administration Columbia Basin Water Transaction Program to cover the costs of these one-year agreements not to divert. Total costs of those agreements would not exceed $8,000.

With the Committee’s recommendation, the attached funding resolution would be presented to the full Board and staff will proceed with project approval and contracting through the Columbia Basin Water Transaction Program process.
MEMORANDUM

To: Streamflow Enhancement and Minimum Stream Flow Committee

From: Sarah Lien

Date: January 7, 2014

Re: Water Transactions Program – Teton River Basin – South Leigh Creek Transactions

Background and Ecological Significance of South Leigh Creek

South Leigh Creek is a tributary to the Teton River located in the upper Teton Valley. The tributary runs from east to west, originating in the Teton Range and flowing towards the Teton River. The tributary offers excellent fish and wildlife habitat and supports a Yellowstone cutthroat trout (YCT) population.

Currently, irrigation withdraws result in the annual dewatering of the stream, and each year the stream is subject to the futile call doctrine. Pervasive yearly dewatering serves to restrict fish movement and migration, reduce valuable habitat, and elevate stream temperatures. Restoring flow to specific reaches in South Leigh Creek will have a positive impact on the YCT fishery in that tributary, serving to create valuable habitat, allowing for fish passage and migration, decreasing stream temperatures, and ultimately helping to encourage the recovery of YCT populations in the upper Teton Valley.

YCT are currently listed as a "species of greatest concern" for the Teton River Basin in the Idaho Comprehensive Wildlife Conservation Strategy (February 2006), and by consequence garner management priority throughout their historic range, including the Teton Basin. South Leigh Creek is incredibly valuable for YCT. The perennial, mountain section of South Leigh Creek houses a genetically pure population of YCT.

A great deal of effort has been committed to restoring and improving fish habitat, and preventing fish entrainment in irrigation diversions on South Leigh Creek. FTR has conducted three stream restoration projects on South Leigh Creek, restoring and stabilizing over 1,350 feet of stream and re-vegetating over 6,755 square feet of stream bank. Substantial stream restoration work has also been conducted by private landowners. Additionally, FTR worked with irrigators to rebuild the largest diversion on South Leigh Creek, the Hog Canal diversion. The rebuild not only incorporated modern diversion works but solar operated fish screens. Building from the success of that project, FTR is currently working with irrigators to install fish screens on the Desert Canal. The project is tentatively scheduled for construction in the fall of 2014.

South Leigh Creek is listed under Section 303(d) of the Clean Water Act. The stream has been listed for sediment and a TMDL has been developed by the Idaho Department of Environmental Quality. Stream restoration efforts have served to aid in the reduction of sediment transported in stream. Additionally, IDEQ has determined that the stream does not support one of its designated beneficial uses, cold water aquatic life. Flow restoration efforts in South Leigh Creek will help decrease stream temperature and
increase available habitat for aquatic species, both of which are important to ensuring that South Leigh Creek once again supports its designated beneficial uses.

Overall, the flow restoration strategy on South Leigh Creek aims to provide additional in-stream habitat for native YCT, as flow is the primary limiting factor preventing development of a more robust YCT population in this tributary. However, it is critically important that flow restoration efforts are conducted in such a manner, and in close coordination with IDF&G, to ensure that the genetically pure population of YCT is not jeopardized by non-native fish invasion. It is agreed that the transactions proposed below reach those goals.

**Description of Proposed Transactions**

**A. Dan and Patti Burr**

Dan and Patti Burr have two water rights that they propose donating to the Idaho Water Transactions Program for a period of 5 years. If approved, the water rights will be leased into the Idaho Water Supply Bank, to be rented by the IWRB for delivery to the Teton River minimum stream flow right. Through this transaction 6 acres of land will be fallowed throughout the five year term. This transaction will add 0.11 cfs of flow to South Leigh Creek.

These water rights have relatively junior priority dates. Water right number 22-13436 has a priority date of June 10, 1897 and water right number 22-13437 has a priority date of June 1, 1898. It is anticipated that these water rights will be in priority, and therefore deliverable to the Teton River minimum stream flow right, when South Leigh Creek is hydraulically connected to the Teton River. As a consequence, despite this being a futile call stream, leasing these water rights through the Idaho Water Transaction Program should not impact the historic delivery of other water rights on the stream or result in injury to other water right owners, and the leased rights should be conveyed to the Teton River minimum streamflow reach without issue.

A proposal to fund these donations has been submitted to the Columbia Basin Water Transaction Program in the amount of $704.00. The requested funds will be placed into the Board’s revolving development water transaction subaccount to pay the fees associated with the lease/rental of water in the Idaho Water Supply Bank, as follows: Water Right Application Fee ($500.00); 10% Administrative Fee ($179.00); and Recording Fee ($25.00).

**B. Osagia, LLC**

Osagia, LLC has one water right that it proposes to enter into the Idaho Water Transactions Program for a period of 1 year. Through this transaction 36 acres of land will be fallowed during the one year term. This transaction will add 0.74 cfs of flow to South Leigh Creek.

The water right held by Osagia, LLC is one of 5 water rights with an April 1, 1889 priority date. These five water rights are the most senior water rights on South Leigh Creek. As mentioned above, South Leigh Creek has historically been deemed futile on an annual basis, and is therefore subject to the futile call doctrine each year.

The Osagia, LLC water right has historically been diverted at the Desert Canal diversion, which is located near the upper end of the annually dewatered stream reach, also referred to as the futile call reach. (See, attached map entitled South Leigh Creek Transaction Map.) Because this transaction involves a water right historically diverted at the upper end of a futile call reach, it is proposed that the IWRB enter into an agreement not to divert with Osagia, LLC, formalized in part by leasing the water right into the Water Supply Bank and restricting rental of the water right (as opposed to utilizing the Water Supply Bank to rent the water to the Teton River minimum streamflow reach). This transactional structure will ensure
that the water right is legally deliverable to the historic point of diversion, at the Desert Canal, regardless of whether the stream has been deemed futile or not. This structure satisfies the objectives of the Idaho Water Transactions Program by ensuring that South Leigh Creek remains wetted to the Desert Canal diversion and that the Osagia, LLC water right is left in stream, serving to increase available habitat for Yellowstone cutthroat trout.

Bob Loucks valued the water right at $87.65/acre. The valuation is based upon the historical use of the water rights, which included generating one cutting of hay and then pasturing the aftermath. The valuation was presented to the water right owner and found acceptable. This is the same valuation and pricing structure utilized to value the Spring Creek water transactions and serves to keep pricing consistent in the upper Teton Valley.

Osagia, LLC also has a groundwater right appurtenant to this parcel of land, water right number 22-13815. It is proposed that this water right also be leased into the Idaho Water Supply Bank for a one year term, to protect the water right from claims of forfeiture and ensure that neither ground nor surface water are utilized to irrigate the property. (See, attached email from Tony Olenichak.)

A proposal to fund these transactions has been submitted to the Columbia Basin Water Transaction Program in the amount of $3,902.00. The requested funds will be placed into the Board’s revolving development water transaction subaccount which will be used to compensate the water right owner and cover the recording fee, as follows: Water Right Application Fee: ($500.00); 10% Administrative Fee ($221.00); Payment to Water Right Holder ($3,156.00); and Recording Fee ($25.00).

**Monitoring and Contract Compliance**

Monitoring and contract compliance will be conducted by the local water district (WD 01) and Friends of the Teton River. It is anticipated that the point of diversion associated with these water rights, as well as all other diversions on the tributary, will be monitored by WD 01 on a weekly basis to ensure that the water rights remain in stream. Ecological and fisheries benefits will be monitored by Friends of the Teton River, in conjunction with Idaho Department of Fish and Game.

**Letters of Support and Public Outreach**

*Water District 01:* The proposed transactions have been reviewed by Lyle Swank and Tony Olenichak of WD 01. No concerns have been raised with the transactions from either a water delivery or an injury perspective. Correspondence from Mr. Swank and Mr. Olenichak regarding this matter has been attached to this briefing memorandum.

*Idaho Fish and Game:* Each of the water transactions has been reviewed by Dan Garren, Regional Fisheries Manager for Idaho Fish and Game. Mr. Garren has submitted a letter of support which has been attached to this briefing memorandum.

*Informational Open House:* FTR hosted an informational open house on Wednesday, December 4, 2013 in Driggs, Idaho at the Driggs City Center to provide members of the public with an opportunity to learn about the proposed water leases discussed in this memorandum. The event was held in an effort to educate the water users and citizens of Teton Valley about the Idaho Water Transaction Program generally, and address any questions or concerns about the South Leigh water leases contemplated in this memorandum. The event was publicized in the Teton Valley Citizen on November 27, 2013. The Teton Valley Citizen is one of Teton Valley’s local newspapers. It is published weekly and made available to the public free of charge at venues throughout Driggs, Victor, and Tetonia. Additionally, the event was publicized in FTR’s weekly e-blast on Monday, December 2, 2013. FTR received no inquiries in regard to the South Leigh Creek leases as a result of this outreach.
Case,

Reviewing the information sent to me by Sarah Rupp indicates the two water rights 22-13436 and 22-13437 currently assigned to the Bell-McCracken Ditch on South Leigh Creek will be deposited into the Idaho Water Supply Bank and then rented by the IWRB for delivery to the Teton River point of diversion described in minimum stream flow right 22-7369. The intent of the transaction appears to be to increase the flow in South Leigh Creek in the reach from the Bell-McCracken Ditch on South Leigh Creek to the point(s) of diversion on the Teton River for water right 22-7369 resulting from not diverting water rights 22-13436 and 22-13437 through the Bell-McCracken Ditch for irrigation when they are in priority. It does not appear that this transaction would interfere with the delivery to other water rights on South Leigh Creek or the Teton River.

Changing the point of diversion for water rights 22-13436 and 22-13437 so that these rights are not delivered to the Bell-McCracken Ditch may result in additional water in the reach from the Bell-McCracken Ditch to the Teton River but does not necessarily guarantee this result. If the flow at the mouth of South Leigh Creek is greater or equal to the flow rates of water rights 22-13436 and 22-13437, it wouldn't be necessary for the Watermaster to curtail any other South Leigh Creek water rights to provide additional water to the lower reach on South Leigh Creek because the IWRB would be receiving its entire amount of South Leigh Creek water delivered to the Teton River for water rights 22-13436 and 22-13437, even if the South Leigh Creek channel was dry at some point between the Bell-McCracken Ditch and the mouth of South Leigh Creek.

The transaction also includes depositing water right 22-13817 into the Idaho Water Supply Bank and then rented by the IWRB for the purpose of changing the nature of use from irrigation to insteam flow without changing the point of diversion. Water right 22-13817 is for diverting South Leigh Creek water for irrigation through the Desert Ditch. The intent of the transaction is to keep the flow rate and priority for water right 22-13817 assigned to the Desert Ditch ensuring that the water right flow rate will be delivered in the South Leigh Creek channel to the point where the Desert Ditch diverts water from the creek, as it has been delivered to that point in the past for irrigation. It does not appear that this transaction would interfere with the delivery to other water rights on South Leigh Creek.

One final thought…..Because the land irrigated by water right 22-13817 is also covered by ground water right 22-13815, and the proposal indicates the owner of the water rights will not irrigate the 36 acres described in both water rights, perhaps both water rights owned by Osagia, LLC for the 36 acres should be included in the transaction.

Tony Olenichak
Program Manager
Water District #1
From: Case, Morgan  
Sent: Tuesday, November 05, 2013 5:13 AM  
To: Olenichak, Tony  
Subject: South Leigh Creek Water Transactions

Tony,

As you are aware, Friends of the Teton River has been developing water transactions in the Teton River Basin in partnership with the IWRB. Sarah Rupp will be presenting two proposed transactions on South Leigh Creek to the IWRB Streamflow Enhancement and Minimum Stream Flow Committee on November 18th. As a local expert on water administration and delivery in the Upper Snake, I would like to request your opinion on the proposed transactions. I believe that Sarah spoke to you of the transactions in detail, but to refresh your memory...

South Leigh Creek Burr - A five-year lease/rental of 0.11 cfs of water rights irrigating 5 acres.

South Leigh Creek Osagia - A one-year agreement not to divert 0.74 cfs of water rights irrigating 36 acres.

Thank you for your help.

Morgan Case
November 6, 2013

Dear Sarah:

The Idaho Department of Fish and Game is charged with the Preservation, Protection, Perpetuation and Management of all of Idaho’s fish and wildlife. As such, we are continually trying to increase the abundance of our fish and wildlife resources across the state. We do this through a variety of means, but one key mechanism we implement is the creation and improvement of habitat.

The water transaction project you have proposed on South Leigh Creek should result in more wetted channel within South Leigh, downstream to the Desert Canal diversion. This habitat can then be utilized by the allopatric population of native Yellowstone cutthroat trout. Because South Leigh does not connect to the Teton River consistently, the fish population in South Leigh consists only of native cutthroat trout, and they would be the species that would benefit from this increased habitat.

As your water transaction program grows in the future, it is important to keep in mind that connecting the few allopatric populations of cutthroat in the Teton drainage to the Teton River is not in the best interest of our native fish. However, in-stream programs that improve cutthroat habitat without creating additional connectivity are very worthwhile, and the Department supports additional work like you have outlined in this project.

Please contact me at 208-525-7290 if you have additional thoughts or comments on this. Thank you for your contribution to Idaho’s fishery and wildlife resources.

Sincerely,

Dan Garren
Regional Fisheries Manager
MEMORANDUM

To: Streamflow Enhancement and Minimum Stream Flow Committee
From: Sarah Rupp
Date: January 3, 2014
Re: Water Transactions Program – Teton River Basin – Badger Creek Transaction

Background and Ecological Significance of Badger Creek

Badger Creek is a tributary to the Teton River located in the upper Teton Valley, north of Tetonia, Idaho. The tributary runs from east to west, originating in the Teton Mountain Range and flowing towards the Teton River.

YCT are currently listed as a "species of greatest concern" for the Teton River Basin in the Idaho Comprehensive Wildlife Conservation Strategy (February 2006), and by consequence garner management priority throughout their historic range, including the Teton Basin. Badger Creek offers excellent fish and wildlife habitat and supports a genetically pure Yellowstone cutthroat trout (YCT) population.

The natural stream hydrology and geology of the Badger Creek drainage results in the annual dewatering of the stream, and each year the stream is subject to the futile call doctrine. Irrigation withdrawals exacerbate this issue by dewatering the stream more quickly than it would under natural conditions.

The middle section of Badger Creek is dry each year, whereas both the upper and lower reaches flow perennially. YCT in the Badger Creek system have adapted to the annual dewatering of the stream by either: (1) migrating to the lower reaches of Badger Creek and into the Teton River canyon; or (2) migrating upstream onto US Forest Service land. Often fish, particularly those attempting to migrate upstream onto US Forest Service land, are stranded in isolated pools.

One particular location where YCT are commonly stranded in isolated pools is between two irrigation structures, the Badger Splitter and the Ricks Diversion. In recent years each of these diversions has been retrofitted to be more fish friendly. Historically the Badger Splitter served to entrain a great number of YCT each year. This issue was resolved in 2010 when FTR and the local irrigators worked to rebuild that diversion structure, installing two new headgates and rotating belt fish screens. The Ricks Diversion was subsequently retrofitted in 2012. The check structure associated with the diversion historically served as a fish passage barrier and was structurally compromised by high water in 2010 and 2011. These issues were addressed by FTR and the local irrigators by rebuilding the wing wall associated with the check structure, and installing a fish ladder allowing fish to move upstream past the check structure.

With the barrier and entrainment issues resolved, water availability is the single factor preventing the successful movement of YCT into perennially flowing reaches of the stream. The transaction described below aims to help address that issue.
Description of Proposed Transaction

Old West Business Park has one water right that it proposes leasing in stream through the Idaho Water Transactions Program for a period of 5 years. Through this transaction 108.3 acres of land will be fallowed or dry land farmed. This transaction will add 1.91 cfs of flow to Badger Creek.

The water right held by Old West Business Park is one of 3 water rights with a June 1, 1891 priority date. These three water rights are the most senior water rights on Badger Creek and all of them have historically been diverted at the Badger Splitter diversion. Because of its relative seniority on the stream, the water right owned by Old West Business Park is deliverable throughout the entire irrigation season, even during those times of year when Badger Creek is subject to the futile call doctrine.

The purpose of the proposed transaction is to increase the quantity of water in stream between the Badger Splitter and the Ricks Diversion, approximately a 0.35 mile stretch of stream. Increasing the quantity of water in this stream reach will increase the probably that YCT can successfully migrate upstream onto US Forest Service land when Badger Creek becomes dewatered. This will help ensure that YCT do not become stranded in isolate pools of water, becoming subject to bird predation or death when the pools dry up.

As mentioned above, the Old West Business Park water right has historically been diverted at the Badger Splitter, which is located at the upper end of the seasonally dewatered stream reach. It is therefore proposed that the IWRB enter into an agreement not to divert with Old West Business Park and lease the water right into the Water Supply Bank. This transactional structure will ensure that the water right is legally deliverable to the historic point of diversion (the Badger Splitter), regardless of whether the stream has been deemed futile or not, and protect the right from risk of forfeiture. Further, to ensure that the water right is not simply re-appropriated by downstream water users, a seasonal bypass agreement with the Ricks Ditch water users will be negotiated.

The water has been valued at $75/acre. The valuation is based upon irrigated vs. non-irrigated land rental values, the difference between the two being the proposed value of the water. In this area, dryland grain rent generally ranges from $50-$75/acre, while irrigated grain rent generally ranges from $100-$175/acre. Given those numbers, the water would have a value ranging between $50-$100/acre. The median value of $75/acre was presented to the water right holder and found acceptable. At $75/acre the landowner will receive an annual payment of $8,122.50, amounting to $40,612.50 over the course of the lease term. Given the seniority of the water right and the direct environmental benefit associated with the transaction this seems to be very reasonable.

The next Columbia Basin Water Transaction Program funding proposal deadline is on January 15, 2014. Should the Committee deem it appropriate, FTR would like to submit a funding proposal for this transaction to the CBWTP at that time.
Ricks Diversion: FTR installed a fish ladder and new wing wall on the headgate at this location in 2012.

Leased water will increase flow in this seasonally dewatered reach of stream between the Badger Splitter and Ricks Diversion (~0.35 miles). Transaction will prevent stranding of YCT attempting to move upstream onto the forest where Badger flows year round.

Badger Splitter: FTR installed a new headgate & fish screens at this location in 2010.