



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

January 6, 2017

OTIS BOOTH RESIDENCE TRUST
C/O PALMER MURRAY CO-TRUSTEE
10431 BELLAGI ROAD
LOS ANGELES CA 90077

RE: Expiration of Water Supply Bank Rental Agreement for water rights: 37-7059

Renter,

This letter is to inform you that your rental agreement(s) to rent the above listed water rights from the Water Supply Bank (Bank) expired at the end of 2016.

Once the rental agreement concludes, any diversion or use of water under the rental agreement will no longer be authorized and, if occurring, may be subject to an enforcement action.

If you wish to rent water in the future, please download a rental application from: <http://idwr.idaho.gov>. You may submit rental applications on November 1 of the year prior to the intended use of rental water. **YOU ARE ENCOURAGED TO FILE AN APPLICATION AT LEAST 3 MONTHS PRIOR TO THE DATE YOU DESIRE TO USE RENTAL WATER.**

If you have any questions about this matter, please contact me at (208) 287-4918.

Sincerely,

A handwritten signature in black ink, appearing to read 'RB' followed by a long horizontal stroke.

Remington Buyer
Water Supply Bank Coordinator

Enclosures:

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WATER SUPPLY BANK RENTAL AGREEMENT

RECEIVED

JUN 10 2016

**DEPARTMENT OF
WATER RESOURCES**

This is to certify that: OTIS BOOTH RESIDENCE TRUST
C/O LYNN BOOTH CO-TRUSTEE
10431 BELLAGIO ROAD
LOS ANGELES CA 90077
(310)471-2575

filed an application to rent water from the Water Supply Bank ("Bank"). The Idaho Water Resource Board ("Board"), being authorized to operate a Bank and to contract by and through the Director of the Idaho Department of Water Resources ("Director, Department") for rental of water from the Bank, agrees to rent water as follows:

Summary of Water Rights or Portions Rented from the Bank

Water Right	Priority Date	Source	Tributary	Rented Rate	Annual Rented Volume	Total Rented Acres
37-7059	3/11/1970	Ground Water	Big Wood River	0.04 cfs	7.1 af	5.4 ac

Annual Combined Rental Totals *0.04 cfs *7.1 af *5.4 ac

*This rental authorizes a diversion rate of 0.02 cfs and an annual diversion volume of 3.5 AF for the irrigation of 1.0 acres.

Term of Rental: This rental is in effect from the day the Idaho Water Resource Board signs the rental agreement and shall be in effect until December 31, 2016.

Rental Fee: \$12.07

The fee for rental of the above-described water is \$120.70. Because of a private agreement between the renter and the lessor, only the administrative fee for ten percent of the rental fee (\$12.07) shall be paid. No rental fees will be refunded once the fee is collected and the start date for a Rental Agreement has passed.

Detailed water right conditions are attached.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WATER SUPPLY BANK RENTAL AGREEMENT

The undersigned renter agrees to use the water rented under this agreement in accordance with the Water Supply Bank rules and in compliance with the limitations and conditions of use described in this agreement:


Signature of Renter

Palmer N. Murray, Trustee
Printed Name and Title*

June 11, 2016
Date

Signature of Renter

Printed Name and Title*

Date

*Please provide title of signatory if signing on behalf of a company or organization or with power of attorney

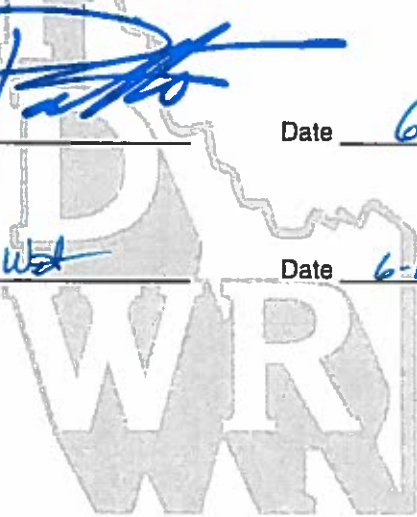
Having determined that this agreement satisfied the provisions of Idaho Code § 42-1763 and IDAPA 37.02.03.030 (Water Supply Bank Rule 30), for the rental and use of water under the terms and condition herein provided, and none other, I hereby execute this Rental Agreement on behalf of the Idaho Water Resource Board.

By 
BRIAN PATTON, Acting Administrator
Idaho Water Resource Board

Date 6/13/2016

Rental Approved by IDWR 

Date 6-13-2016



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WATER SUPPLY BANK RENTAL AGREEMENT

WATER USE DETAILS

LOCATION OF POINT(S) OF DIVERSION

GROUND WATER NE¼NE¼ Sec. 7 Twp 03N Rge 18E BLAINE County

BENEFICIAL USE

IRRIGATION

SEASON OF USE

06/15 TO 10/31

RENTER'S PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
3N	18E	7	1.0																1.0

Total Acres: 1.0

CONDITIONS APPLICABLE TO ALL RENTED WATER RIGHTS

1. The use of water under this agreement shall be subject to the provisions of Idaho Code § 42-1766.
2. Rental of the specified right from the bank does not, in itself, confirm the validity of the right or any elements of the water right, or improve the status of the right including the notion of resumption of use. It does not preclude the opportunity for review of the validity of this water right in any other department application process.
3. Use of water under this agreement does not constitute a dedication of the water to renter's place of use, and upon expiration of this agreement, the points of diversion and place of use of the water shall revert to those authorized under the water right and/or again be available to rent from the bank.
4. This rental does not grant any right-of-way or easement to use the diversion works or conveyance works of another party.
5. Use of water under this agreement shall not prejudice any action of the Department in its consideration of an application for transfer or permit filed by the applicant for this same use.
6. Renter agrees to comply with all applicable state and federal laws while using water under this agreement.
7. Renter agrees to hold the Board, the Director and the state of Idaho harmless from all liability on account of negligent acts of the renter while using water.
8. Renter acknowledges and agrees that the Director may terminate diversion of water if the Director determines there is not a sufficient water supply for the priority of the right or portion thereof being rented.
9. Failure of the renter to comply with the conditions of this agreement is cause for the Director to rescind approval of the rental agreement.
10. A measuring device of a type approved by this Department shall be maintained as a part of the diverting works.
11. This rental agreement does not authorize the construction of a well.
12. The renter must diligently pursue a permanent water right to provide for the uses authorized under this rental agreement.

13. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 3.5 afa per acre at the field headgate for irrigation of the lands above.
14. Use of water under this agreement will be regulated by a watermaster with responsibility for the distribution of water among appropriators within a water district. At the time of this approval, this water right is within State Water District No. 37.



Effective until December 31, 2016

NENE

03N18E7

Source: Esri, DigitalGlobe, GeoEye, iSat, IMCO, USGS, Aero, and the GIS User Community

☒ Authorized Rental Point of Diversion
☐ Authorized Rental Place of Use
☒ Townships
☐ PLS Sections
☐ Quarter Quarters



STATE OF IDAHO
WATER RESOURCE BOARD

RECEIVED

APR 11 2016

DEPARTMENT OF
WATER RESOURCES

AMENDED APPLICATION

APPLICATION TO RENT WATER
FROM THE BOARD'S WATER SUPPLY BANK

Applicant Name: The Otis Booth Residence Trust c/o Lynn Booth; Co-Trustee

Is this application being submitted with a lease application as a lease/rental package?

Yes ☒ No ☐

If yes, specify companion water rights in Section 4

This application must be completed according to the minimum requirement checklist below. This checklist is part of the rental application and must be included with the rental application. Applications that do not meet the minimum requirements will not be placed in the processing queue and may be returned until all minimum requirements have been met.

Rental applications should be submitted well in advance of the desired start date for the use of rental water. Rental applications may be processed as early as November 1 of the year prior to the intended use of rental water. Any rental application received on or before November 1 for use in the next year will be assigned a received date of November 1. Rental applications submitted more than one year in advance of the proposed start date for the use of rental water will not be accepted and will be returned to applicants. Rental applications may be returned to applicants if the desired start date for the use of rental water cannot be accommodated by the Water Supply Bank. Rental requests will not be accepted once the rental season of use period has concluded.

One rental application per beneficial use of water. For multiple beneficial uses of water, separate rental requests should be submitted for each unique beneficial use of water. One rental application can be submitted if you propose to rent water from multiple sources.

For additional instructions on completing a rental application, visit the Bank's website at http://idwr.idaho.gov/water_supply_bank.

MINIMUM REQUIREMENT CHECKLIST

Check All Items as Either Attached (Yes) or Not Applicable (N/A)

Yes

- ☒ Completed *Application to Rent Water from the Board's Water Supply Bank*
☒ Confirmation that this form has been printed single sided, per requirement of the Water Supply Bank

Attachment N/A Yes

- 2 ☒ A map showing the proposed point(s) of diversion, place(s) of use, and water diversion and distribution systems proposed to be used with your rental request
- 3A ☐ ☒ Detailed information on a proposed use of rental water
- 3F ☐ ☒ Authorization from the owner/operator of the rental point(s) of diversion
- 3H ☐ ☒ Water modeling to account for the impacts of the rental request
- 3J ☒ ☐ Documents justifying a rate of flow greater than 0.02 cfs/acre
- 3K ☐ ☒ Authorization from the owner/operator of the property at the proposed rental place(s) of use
- 4B ☐ ☒ Explanation of how the rental water will sufficiently accomplish your rental purposes
- 4C ☒ ☐ Explanation of consumptive use amounts for water rights experiencing a change in nature of use

Department Use Only – Proposed Water Right(s)

37-7059

**STATE OF IDAHO
WATER RESOURCE BOARD**

Application to Rent Water (Continued)

1. CONTACT INFORMATION

A. Applicant The Otis Booth Residence Trust c/o Lynn Booth; Co-Trustee

Mailing Address 10431 Bellagio Road, Los Angeles, CA 90077

Street _____ City _____ State _____ Zip Code _____
Email Address office@boothoffice.com Phone Number 310-471-2575

B. Is this application being completed by an authorized representative on behalf of the applicant? Yes ☒ No ☐
If yes, representatives (includes company employees if the applicant is a corporation, as well as legal counsel or consultants) should provide their information below if they desire to be included on correspondence with the rental applicant.

Representative Zach Latham Professional Title Hydrologist

Organization Brockway Engineering PLLC Relationship to Applicant Consultant

Mailing Address 2016 Washington St. N Suite #4 Twin Falls, ID 83301

Email Address zach.latham@brockwayeng.com Phone Number 208-736-8543

2. MAP

Create a map of the proposed point(s) of diversion, place(s) of use and water diversion, delivery and distribution systems. Make sure the rental place of use is outlined and annotated with legal land descriptions (Township, Range, Section and Quarter-Quarters) or with GPS coordinates. For irrigation purposes, mark the number of acres you desire to irrigate. Attach the map to this application and label it Attachment 2.

3. DESCRIPTION OF PROPOSED USE FOR RENTAL WATER

A. Describe why you desire to rent water and provide a detailed description of your proposed use. If the proposed use is not for irrigation, describe in detail how you determined the amount of rental water required. If the space below is insufficient, attach additional sheets as required and label them Attachment 3A:
Proposed rental is for irrigation use at applicant's property.

B. Enter the desired and/or minimum rates of flow, volume, or irrigable acres requested for your rental purposes:

Desired Rate (Cubic Feet/Second)	Desired Volume (Acre-Foot)	Minimum Rate* (Cubic Feet/Second)	Minimum Volume* (Acre-Foot)	Desired Acres (if applicable)
0.02 CFS	3.6 AF	0.02 CFS	3.6 AF	2.8 AC

* Sometimes water rights provide an exceptionally low rate per acre and/or low volume per acre. This section is meant to establish an acceptable range of water sufficient for your proposed water use. Please see question 4B and complete if necessary.

C. This section must be completed in full. Enter the proposed start date and latest possible start date for using rental water as well as the number of years you would like to rent water. The latest possible start is the latest possible date by which you would be willing to pay for a rental and be able to benefit from utilizing rental water.

Desired Start Date (month/day/year)	Latest Possible Start Date (month/day/year)	*Mark Desired Rental Duration (Calendar Years)					**Applicant's preference if rental application cannot be processed prior to the latest possible start?	
5/1/16	7/1/16	☒	☐	☐	☐	☐	☒ Process application as soon as possible	☐ Return application to applicant

* The number of years permissible for a rental is subject to the lease contract duration for the water right(s) being rented.

** Per Idaho Code 42-201, it is unlawful to divert or use water without a valid water right. Water Supply Bank rental applicants are not authorized to utilize rental water prior to the execution of an approved rental agreement. Rental requests may be returned to applicants if no water is available from the Bank to fulfill a rental request.

STATE OF IDAHO
WATER RESOURCE BOARD

Application to Rent Water (Continued)

- D. Describe your water distribution system and how rental water will be delivered from the point(s) of diversion (POD) to the proposed place of use (POU):

Water is conveyed to rental POU through buried pressurized irrigation system.

- E. Describe the physical type (pump, headgate, etc.) and location of the POD from which rental water is proposed to be diverted:

POD Description	Water Source	Other Water Rights Diverted from this POD
Domestic Well	Ground Water	rental portions; 37-21259, 37-21261, 37-21263

If the POD(s) above are located where water is turned into a canal, lateral or ditch, or if they are located on your property but are serviced by water that is delivered via a canal, lateral or ditch, your rental request must include documented authorization from all relevant canal companies, irrigation districts and/or water delivery entities, confirming that they consent to your diversion of water from their system.

- F. Has documented consent from all relevant water delivery entities been obtained? Yes ☐ N/A ☒
If yes, include documented consent as Attachment 3F.

- G. Do any POD(s) identified in Question 3E divert from a water source that may require water modeling? Yes ☐ No ☒
Refer to the Water Modeling Requirements Information Sheet to determine if a rental POD may require water modeling.

- H. Has water modeling been provided with your rental request? Yes ☐ N/A ☒
If yes, label modeling Attachment 3 H.
Rental applications that require modeling will be returned if modeling is not provided.

- I. Specify the desired beneficial use of water and the requested season of use or number of acres required:

- ☒ Irrigation 2.8 (number of acres) Duration: Subject to IDWR standard seasons of use
- ☐ Commercial from: _____ (mm/dd) to: _____ (mm/dd)
- ☐ Stockwater from: _____ (mm/dd) to: _____ (mm/dd)
- ☐ Industrial from: _____ (mm/dd) to: _____ (mm/dd)
- ☐ Other: _____ from: _____ (mm/dd) to: _____ (mm/dd)

- J. For irrigation uses, do you propose to divert water at a rate greater than 0.02 cfs/acre? N/A ☐ Yes ☐ No ☒
If yes, justify the rate of flow and attach any supporting documents as Attachment 3J. Justification may include information on soil composition, conveyance losses, crop type, irrigation systems, public access areas, etc. A rate of 0.03 cfs/acre is permissible for irrigation of 5 acres or less.

N/A.

- K. Do you own the land at the proposed rental place of use (POU)? Yes ☒ No ☐
If no, attach documentation from the POU owner/operator confirming your authorization to use the POU and label it Attachment 3K.

- L. List all other water rights and sources of water at the rental place of use for the same purpose, including privately owned water rights and water received from a municipal supplier, an irrigation district, a canal company or any other water delivery entity. Explain why additional water is required:

No other irrigation water rights are appurtenant to the proposed rental POU.

**STATE OF IDAHO
WATER RESOURCE BOARD**

Application to Rent Water (Continued)

4. RENTAL REQUESTS FOR SPECIFIC WATER RIGHTS

A. Are you requesting to rent specific water rights?

Yes ☒ No ☐

If yes, specify below the elements of the water rights you are requesting to rent. If no, continue to Question 4B.

Important Information: Diversion rates and volumes sought for rent must be proportionate to the per acre diversion rates and per acre volume limits of the water right under lease contract to the Water Supply Bank. Prior to completing this section, applicants should review all water right lease contracts and any active rental agreements to determine which elements of a water right are available to satisfy a rental request. Lease and rental documents are searchable via [IDWR's website](#).

Water rights identified below must either already be leased to the Bank or a lease proposal should accompany this rental request. Rental requests for water rights not yet leased to the Bank will be returned if companion lease applications are not provided with the rental request. For leased rights featuring combined limits, rentals must be consistent with combined diversion rate, volume or acre limits. Combined limits should be listed on a row below water right numbers.

Water Right Elements Leased to Water Supply Bank					Leased totals, minus water right elements involved in active rental agreements, equals water right elements available for rent	Water Supply Bank Rental Request		
Water Right Number (leave blank if sub-total of combined limits)	Nature of Use	Diversion Rate (CFS)	Volume (AF)	Acres (AC)		Diversion Rate (CFS)	Volume (AF)	Acres (AC)
37-7059	Irrigation	0.08	14.9	11.5		0.02	3.6	2.8
Applicants must ensure the requested rate per acre and volume per acre do not exceed the rate per acre and volume per acre limits of water rights leased to the Water Supply Bank					TOTAL	0.02	3.6	2.8
						CFS	AF	AC

**Attach multiple copies of this page if space above is insufficient to list all water rights requested to be rented on this application.*

B. If water right conditions, combined limits, or the sum of all water right elements being requested provide an unconventional duty of water (e.g., an unusually low rate per acre or volume per acre for irrigation use), explain how your proposed rental will sufficiently accomplish your intended purposes. Attach a separate page if space is insufficient and label it **Attachment 4B**:

Applicant seeks to rent back 2.8 acres for the irrigation of 1.0 acres of physical land. Low diversion rate associated with 37-7059 necessitates rental of additional acres in order to divert and apply 0.02 cfs per acre.

C. Does your rental request propose to change the nature of use for any water right(s) being rented?

Yes ☐ No ☒

If yes, explain how the water right(s) will be converted to new uses. Include the historic, consumptive use amounts for the water right being rented if you have it, as well as the new consumptive use amount for your proposed beneficial use. If space below is insufficient, attach a separate page and label it **Attachment 4C**:

N/A.

STATE OF IDAHO
WATER RESOURCE BOARD

Application to Rent Water (Continued)

5. ADDITIONAL INFORMATION

- A. Is this the first time that rental water is being requested for this purpose at the rental place of use? Yes ☐ No ☒

If no, list previous rental requests/agreements and explain why you have not secured a permanent water right for your needs:
See previous 2015 WSB rental approval.

- B. Have you or do you intend to submit an application for permit or transfer proposing a similar use as this rental?

If yes, describe:

Yes ☐ No ☒

N/A.

- C. Was this rental application submitted in response to a Notice of Violation (NOV) or a pending NOV?

Yes ☒ No ☐

If yes, describe the date and location of the NOV.

NOV E2014-691, Dated 11/24/2014.

- D. Additional Information

This amended WSB Rental application supersedes the previous application which was denied in a 3/18/16 IDWR letter. See attached hydrologic analysis in support of amended application.

DECLARATION

I hereby assert that the information contained in this application is true to the best of my knowledge. I understand that any willful misrepresentations made in this application may result in rejection of the application or cancellation of an approval. I understand that if this rental application is approved, it will be subject to the provisions of Section 42-1766, Idaho Code and all applicable state and federal laws. I understand that the submission of a rental application provides no guarantee for approval of a rental agreement. I also understand that, per Idaho Code 42-201, it is unlawful to divert or use water without a valid water right and that I am not authorized to utilize water as proposed in this application prior to the execution of an approved rental agreement.


Signature of Applicant

Lynn Booth
Printed Name of Applicant

4-7-16
Date

Signature of Representative

Printed Name of Representative

Date

Mail to:

Idaho Department of Water Resources
P.O. Box 83720
Boise, ID 83720-0098



0 60 120 240 Feet

THE OTIS BOOTH RESIDENCE TRUST
WATER BANK RENTAL, 1.0 AC. 2016
NAIP 2015 AERIAL

Legend

- Trust Well
- WSB Rental 1 ac
- Parcels
- townshp
- Sections
- ladesec





The Otis Booth Residence Trust- Stream Depletion Analysis for 1.0 Acre Amended Water Supply Bank Rental Application; 37-7059

To: Mrs. Cherie Padilla- IDWR State Office
From: Zach Latham, M.S., Hydrologist
Cc: The Otis Booth Residence Trust
Date: April 8th 2016
Re: The Otis Booth Residence Trust- Stream Depletion Analysis For 1.0 Acre Amended Water Supply Bank Rental Application; 37-7059.

Overview

This memo serves as a stream depletion analysis in support of the amended water supply bank (WSB) rental application filed on behalf of The Otis Booth Residence Trust (Trust) which seeks to irrigate 1.0 acre on the Trust's property. The previous WSB rental filed in 2016 for the irrigation of 4.1 acres on the Trust's property was denied by IDWR on 3/18/16, citing depletion to the Big Wood River during summer months as a result of the proposed rental. This amended rental application seeks to divert 0.02 cfs of ground water right 37-7059 from an existing domestic well on the Trust's property within the River Zone. Water right 37-7059 is authorized to divert 0.20 cfs for the irrigation of 28 acres from two wells in the Ketchum Zone T.04N R.18E Sec. 11 NE ¼ SE ¼ and in T.4N R.18E Sec. 12 SW ¼ SW ¼.

AWAS Modeling

The Trust's existing 8" well is located approximately 91' from the Big Wood River, is 68.5' deep and is drilled in gravels and clays (alluvium) and granite and shale. The Alluvial Water Accounting Software (AWAS) was used with a daily time step to simulate pumping from the two Hubbard wells and from the one Trust well to analyze depletions in the Big Wood River over the course of the 200 day irrigation season. Depletions to the Big Wood River as a result of a proposed water supply bank rental from a well within the Ketchum Zone to a well within the River Zone should be compared with historic depletions to the Big Wood River as those historic depletions have been occurring and in this instance pre-date minimum in-stream flow water rights in this reach of the Big Wood River.

Assumptions include discounting the travel time between where depletion impacts Warm Springs Creek upstream of the Trust property due to the Hubbard Wells and the depletion to the Big Wood River due to the Trust Well. AWAS modeling simulated the daily pumping/extraction gallons per minute rate equivalent to that of the daily Hailey Ranger Station P_{def} value associated with Grass- Turf (lawns)- Irrigated on 1.0 acre per Allen and Robison¹. The daily P_{def}

¹ Allen, Richard G. and Clarence W. Robison, 2012. *Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho: Supplement updating the Time Series through December 2008, Research Technical*

value associated with Grass- Turf (lawns)- Irrigated would be the consumptive use associated with the rental request and thus the daily extraction from the well. The daily pumping rate (P_{def} value) for each of the Hubbard Wells was divided by two so that the sum of the wells daily pumping equaled the P_{def} value. The daily pumping rate (P_{def} value) for the Trust well equaled the daily P_{def} value

Where applicable, values input into AWAS model runs were used from the analysis performed by Mike McVay at IDWR as listed in the attached "Modeling Scenarios Output.pdf" document supplied to Brockway Engineering in a 3/18/16 email. Values used by Mr. McVay included in Brockway Engineering's AWAS model runs include: a transmissivity value of 28,598 gallons per day per foot, Hubbard Well 1 X and W values, and a specific yield value of 0.2 for all three wells. Values chosen by Brockway Engineering for AWAS input include Hubbard Well 2 X and W values, Booth Well X and W values and alluvial aquifer boundary conditions for all three wells. The values chosen by Brockway Engineering are similar to those used by McVay but more accurately represent the true perpendicular distances from the pumping well(s) to the adjacent water source and to the edge of the alluvial aquifer no flow boundary to the pumped wells. AWAS model output (attached) shows the model-predicted cubic feet per second (cfs) depletion to the Big Wood River as a result of the Trust's pumping and the Hubbard pumping (Figure 1). The stream response to the Trust pumping occurs earlier in the irrigation season when compared to the combined Hubbard pumping response. This fact is due primarily to the larger distance to the stream, resulting in a response from Hubbard pumping which is delayed and attenuated. The late season Hubbard response is greater than the Trust response after August 15th. Daily cfs depletions to the Big Wood River as a result of the Trusts pumping are less than the maximum of nine one thousandths of a cfs (0.0085 cfs).

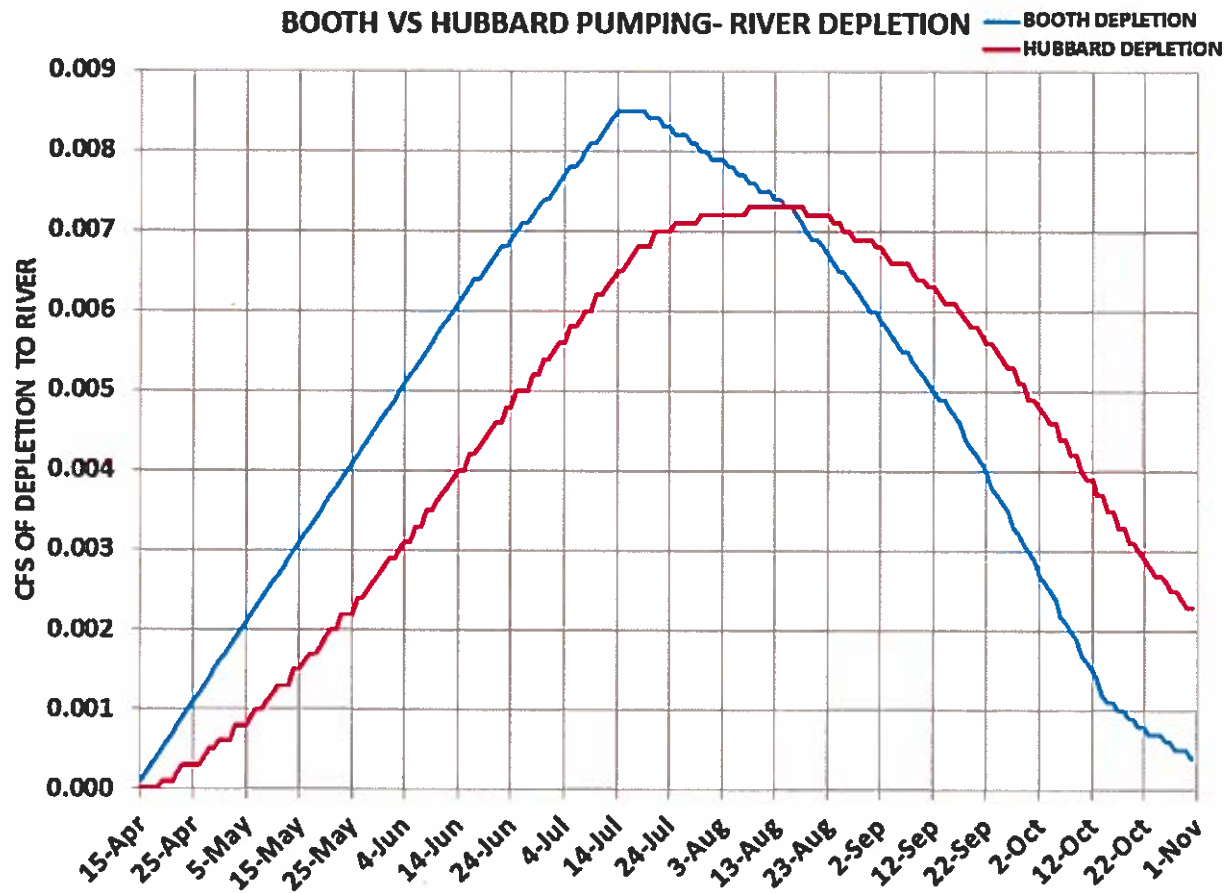


Figure 1: Booth versus Hubbard CFS per Day River Depletion.

For the proposed water bank rental, the Hubbard pumping response on Figure 1 is a benefit to the stream and the Trust pumping is a depletion to the stream. Subtracting the Trust response from the Hubbard response yields the net effect on the stream (neglecting travel time within the river channel). The AWAS model output shows a maximum daily cfs depletion difference of 0.0022 cfs (Figure 2). The Hubbard Wells combined depletion exceeds the Trust Well depletion on August 15th, fourteen days before the August 29th date when the median discharge in the Big Wood River at the USGS Hailey Gauge drops below the combined 189 cfs associated with the Idaho Water Resource Board's minimum in-stream flow water rights 37-7919 and 37-8307 (Figure 2). Therefore, there is no impact to these minimum in-stream flow water rights from the Trust Well depletion when considering the historic Hubbard Wells combined depletion.

Further, the median discharge in the Big Wood River on July 17th is 476 cfs as reported by the USGS using 101 years of data². The maximum difference in daily cfs depletion between the Trust Well and the Hubbard Wells of 0.0022 cfs occurs on or about June 17th. This maximum daily cfs depletion represents 0.00046% (0.0022 cfs / 476 cfs) of the median flow in the Big Wood River on this date. The difference in depletion due to this rental is insignificant, negligible,

²http://waterdata.usgs.gov/nwis/dvstat?referred_module=sw&site_no=13139510&por_13139510_1=1154485,00060,1,1915-07-01,2015-10-06&format=html_table&stat_cds=p50_va&date_format=YYYY-MM-DD&rdb_compression=file&submitted_form=parameter_selection_list

and should in no way be considered an adverse impact or injury on any water right in the Big Wood system. Furthermore, the rental will result in an increase in streamflow at every point and at every time in the 6.6 miles from the Hubbard location to the Trust location. Therefore, even if IDWR takes the position that an impact of 0.00022 cfs or 0.000046% is significant, the increased flow in the 6.6-mile Hubbard-Trust reach is over three times the predicted negative response below the Trust, so the net benefit to the river system as a whole in terms of the values ostensibly protected by the MSF right will clearly be positive. Therefore the rental request under this application should be processed and approved.

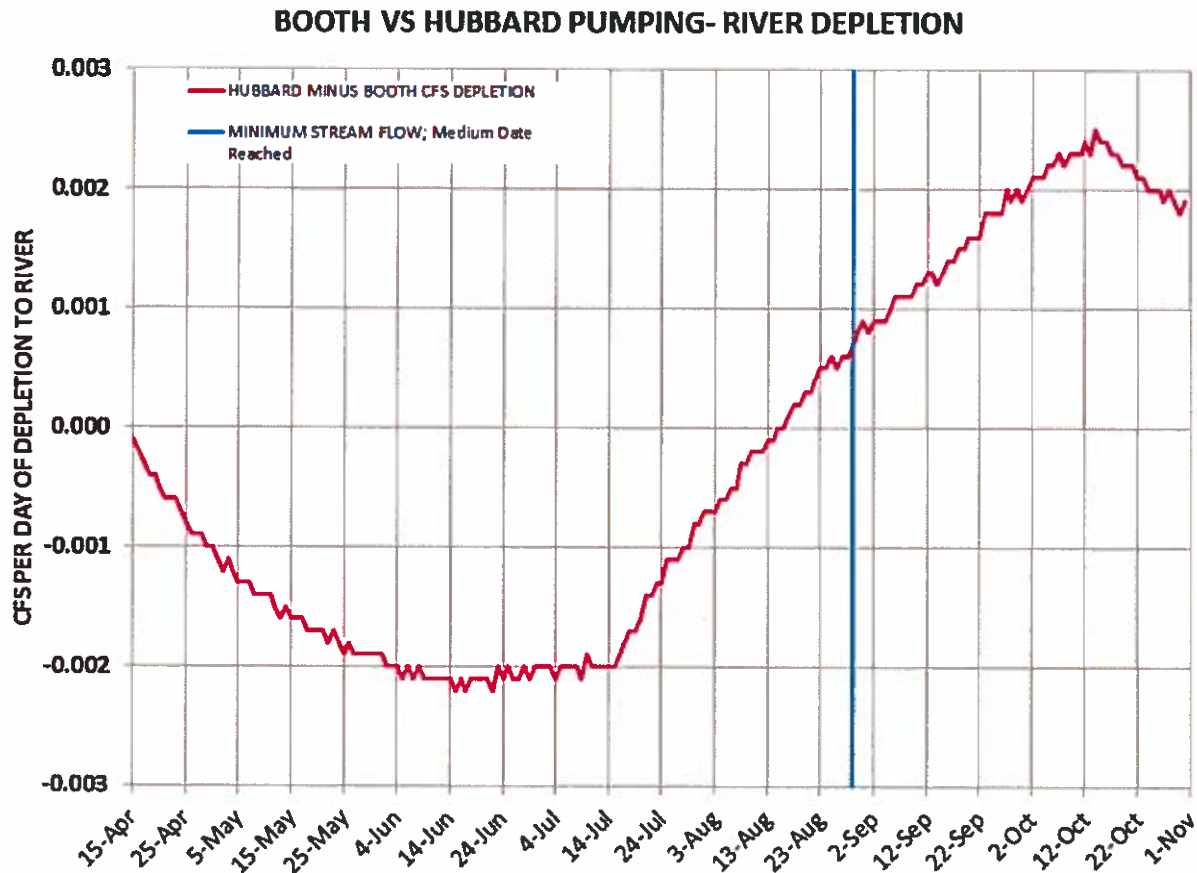


Figure 2: Hubbard Combined Wells Minus Booth Well Daily CFS River Depletion.

Summary

- The cessation of pumping at Hubbard results in a delayed benefit to the stream in the early season but also an extended benefit in the late season when compared to pumping at the Trust location (Figure 1).
- The combined effect downstream of the Trust location (Figure 2) is a maximum of -0.0022 cfs in the early season (June 17) and +0.0024 cfs in the late season (October 14).

- Downstream of the Trust location, there will be a positive effect after approximately August 15 (Figures 1 and 2), and certainly by the date when the MSF right becomes active (August 29, median date).
- There will be a positive effect, maximum of 0.0073 cfs in the 6.6-mile reach from the Hubbard to Trust locations (Figure 1).
- There is no hydrologic justification for a denial of this rental application. There is no justification for a subordination of this application to the MSF right. IDWR should approve the rental application with no subordination condition.

Wells in project:

Well Name	Description	Boundary Condition	W to Bdry (Ft)	B to Bdry (Ft)	Transmissivity (GPD/FT)	Specific Yield	X to Well (Ft)	SDF	Use Partial Stream	Left limit of stream segment	Right limit of stream segment
Hubbard 1	Alluvial Aquifer	▼	1212	0	28598	0.2	459	0	☐	0	0
Hubbard 2	Alluvial Aquifer	▼	1470	0	28598	0.2	703	0	☐	0	0

Pumping records for Hubbard 1

Time unit:

Time interval between printouts:

Number of cycles:

Pumping Rate (GPM)	Time Or
0.052	1
0.076	1
0.101	1
0.125	1
0.15	1
0.174	1
0.199	1
0.223	1
0.248	1
0.272	1
0.297	1
0.321	1
0.346	1
0.37	1
0.395	1
0.419	1
0.444	1
0.468	1
0.493	1
0.517	1
0.542	1
0.566	1
0.591	1
0.615	1
0.64	1
0.664	1

New Pumping Record

Delete Records

Pumping Record Input | Output

Wells in project:

Well Name	Description	Boundary Condition	W to Bdry (Ft)	B to Bdry (Ft)	Transmissivity (GPD/FT)	Specific Yield	X to Well (Ft)	SDF	Use Partial Stream	Left limit of stream segment	Right limit of stream segment
Hubbard 1		Alluvial Aquifer	1212	0	28598	0.2	459	0		0	0
Hubbard 2		Alluvial Aquifer	1470	0	28598	0.2	703	0		0	0

Pumping records for Hubbard 2

Time unit: Days
 Time interval between printouts: 1
 Number of cycles: 1

Pumping Rate (GPM)	Time On
0.052	1
0.076	1
0.101	1
0.125	1
0.15	1
0.174	1
0.199	1
0.223	1
0.248	1
0.272	1
0.297	1
0.321	1
0.346	1
0.37	1
0.395	1
0.419	1
0.444	1
0.468	1
0.493	1
0.517	1
0.542	1
0.566	1
0.591	1
0.615	1
0.64	1
0.664	1

New Pumping Record
 Delete Records

Pumping Record Input Output

Sites:

 Hubbard 1
 Hubbard 2

Period	Q (CFS)	Length	Cumulative Time	Volume Pumped (acre-feet)	Cumulative Volume Pumped (acre-feet)
Hubbard 1 (Days)					
1	0.0001	1	1	0.0002	0.0002
2	0.0002	1	2	0.0003	0.0006
3	0.0002	1	3	0.0004	0.001
4	0.0003	1	4	0.0006	0.0016
5	0.0003	1	5	0.0007	0.0022
6	0.0004	1	6	0.0008	0.003
7	0.0004	1	7	0.0009	0.0039

Time	Dep. Rate(CFS)	Vol. of Dep. (acre-feet)	Vol. of Dep. This Step (acre-feet)
1	0	0	0
2	0	0	0
3	0	0.0001	0
4	0	0.0001	0.0001
5	0.0001	0.0002	0.0001
6	0.0001	0.0004	0.0001
7	0.0001	0.0006	0.0002
8	0.0001	0.0008	0.0002
9	0.0002	0.0011	0.0003
10	0.0002	0.0014	0.0003
11	0.0002	0.0018	0.0004
12	0.0002	0.0023	0.0004
13	0.0003	0.0028	0.0005
14	0.0003	0.0033	0.0006
15	0.0003	0.0039	0.0006
16	0.0004	0.0046	0.0007
17	0.0004	0.0054	0.0008
18	0.0004	0.0062	0.0008
19	0.0005	0.0071	0.0009
20	0.0005	0.008	0.001
21	0.0005	0.0091	0.001
22	0.0006	0.0101	0.0011
23	0.0006	0.0113	0.0012
24	0.0006	0.0125	0.0012
25	0.0007	0.0139	0.0013
26	0.0007	0.0152	0.0014
27	0.0008	0.0167	0.0015
28	0.0008	0.0183	0.0015
29	0.0008	0.0199	0.0016
30	0.0009	0.0216	0.0017
31	0.0009	0.0234	0.0018
32	0.001	0.0252	0.0019
33	0.001	0.0272	0.0019
34	0.001	0.0292	0.002
35	0.0011	0.0313	0.0021
36	0.0011	0.0335	0.0022
37	0.0012	0.0358	0.0023
38	0.0012	0.0381	0.0024
39	0.0013	0.0406	0.0024
40	0.0013	0.0431	0.0025
41	0.0013	0.0457	0.0026
42	0.0014	0.0484	0.0027
43	0.0014	0.0512	0.0028
44	0.0015	0.0541	0.0029
45	0.0015	0.057	0.003

Pumping Record Input Output

Sites:

Hubbard 1	Period	Q (CFS)	Length	Cumulative Time	Volume Pumped (acre-feet)	Cumulative Volume Pumped (acre-feet)
Hubbard 2	Hubbard 2 (Days)					
	1	0.0001	1	1	0.0002	0.0002
	2	0.0002	1	2	0.0003	0.0006
	3	0.0002	1	3	0.0004	0.001
	4	0.0003	1	4	0.0006	0.0016
	5	0.0003	1	5	0.0007	0.0022
	6	0.0004	1	6	0.0008	0.003
	7	0.0004	1	7	0.0009	0.0039

Time	Dep. Rate(CFS)	Vol. of Dep. (acre-feet)	Vol. of Dep. This Step (acre-feet)
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0.0001	0
6	0	0.0001	0
7	0	0.0002	0.0001
8	0.0001	0.0003	0.0001
9	0.0001	0.0004	0.0001
10	0.0001	0.0005	0.0001
11	0.0001	0.0007	0.0002
12	0.0001	0.0009	0.0002
13	0.0001	0.0012	0.0003
14	0.0002	0.0015	0.0003
15	0.0002	0.0018	0.0003
16	0.0002	0.0022	0.0004
17	0.0002	0.0026	0.0004
18	0.0002	0.003	0.0005
19	0.0003	0.0035	0.0005
20	0.0003	0.0041	0.0006
21	0.0003	0.0047	0.0006
22	0.0003	0.0053	0.0007
23	0.0004	0.0061	0.0007
24	0.0004	0.0068	0.0008
25	0.0004	0.0076	0.0008
26	0.0005	0.0085	0.0009
27	0.0005	0.0094	0.0009
28	0.0005	0.0104	0.001
29	0.0005	0.0114	0.001
30	0.0006	0.0125	0.0011
31	0.0006	0.0137	0.0012
32	0.0006	0.0149	0.0012
33	0.0007	0.0162	0.0013
34	0.0007	0.0175	0.0013
35	0.0007	0.019	0.0014
36	0.0008	0.0204	0.0015
37	0.0008	0.022	0.0015
38	0.0008	0.0236	0.0016
39	0.0009	0.0253	0.0017
40	0.0009	0.027	0.0018
41	0.0009	0.0289	0.0018
42	0.001	0.0307	0.0019
43	0.001	0.0327	0.002
44	0.001	0.0347	0.002
45	0.0011	0.0368	0.0021

Pumping Record Input | Output |

Wells in project:

Well Name	Description	Boundary Condition	W to Bdry (Ft)	B to Bdry (Ft)	Transmissivity (GPD/FT)	Specific Yield	X to Well (Ft)	SDF	Use Partial Stream	Left limit of stream segment	Right limit of stream segment
Booth		Alluvial Aquifer	1870	0	28598	0.2	91	0		0	0

Pumping records for Booth

Time unit: Days

Time interval between printouts: 1

Number of cycles: 1

Pumping Rate (GPM)	Time On
0.1	1
0.15	1
0.2	1
0.25	1
0.3	1
0.35	1
0.4	1
0.45	1
0.5	1
0.54	1
0.59	1
0.64	1
0.69	1
0.74	1
0.79	1
0.84	1
0.89	1
0.94	1
0.99	1
1.03	1
1.08	1
1.13	1
1.18	1
1.23	1
1.28	1
1.33	1

New Pumping Record

Delete Records

Pumping Record Input Output |

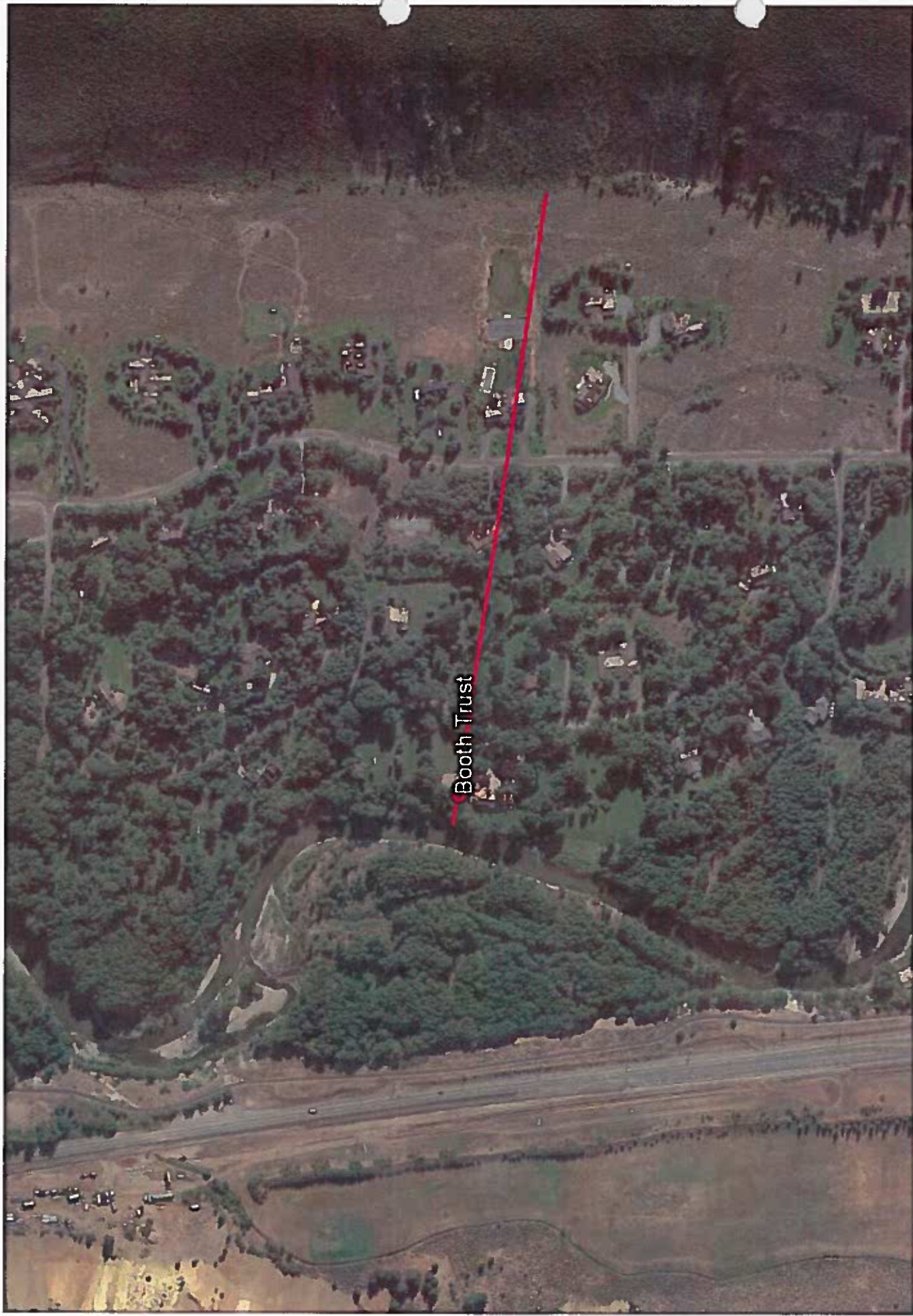
Sites:

Booth	Period	Q (CFS)	Length	Cumulative Time	Volume Pumped (acre-feet)	Cumulative Volume Pumped (acre-feet)
	Booth (Days)					
	1	0.0002	1	1	0.0004	0.0004
	2	0.0003	1	2	0.0007	0.0011
	3	0.0004	1	3	0.0009	0.002
	4	0.0006	1	4	0.0011	0.0031
	5	0.0007	1	5	0.0013	0.0044
	6	0.0008	1	6	0.0015	0.006
	7	0.0009	1	7	0.0018	0.0077

Time	Dep. Rate(CFS)	Vol. of Dep. (acre-feet)	Vol. of Dep. This Step (acre-feet)
1	0.0001	0.0002	0.0002
2	0.0002	0.0006	0.0004
3	0.0003	0.0012	0.0006
4	0.0004	0.002	0.0008
5	0.0005	0.0029	0.001
6	0.0006	0.0041	0.0012
7	0.0007	0.0054	0.0013
8	0.0008	0.007	0.0015
9	0.0009	0.0087	0.0017
10	0.001	0.0106	0.0019
11	0.0011	0.0127	0.0021
12	0.0012	0.015	0.0023
13	0.0013	0.0175	0.0025
14	0.0014	0.0202	0.0027
15	0.0015	0.0231	0.0029
16	0.0016	0.0262	0.0031
17	0.0017	0.0295	0.0033
18	0.0018	0.033	0.0035
19	0.0019	0.0366	0.0037
20	0.002	0.0405	0.0039
21	0.0021	0.0446	0.0041
22	0.0022	0.0489	0.0043
23	0.0023	0.0533	0.0045
24	0.0024	0.058	0.0047
25	0.0025	0.0629	0.0049
26	0.0026	0.068	0.0051
27	0.0027	0.0732	0.0053
28	0.0028	0.0787	0.0055
29	0.0029	0.0844	0.0057
30	0.003	0.0903	0.0059
31	0.0031	0.0964	0.0061
32	0.0032	0.1027	0.0063
33	0.0033	0.1092	0.0065
34	0.0034	0.1158	0.0067
35	0.0035	0.1227	0.0069
36	0.0036	0.1298	0.0071
37	0.0037	0.1371	0.0073
38	0.0038	0.1445	0.0075
39	0.0039	0.1522	0.0077
40	0.004	0.16	0.0079
41	0.0041	0.1681	0.0081
42	0.0042	0.1763	0.0082
43	0.0043	0.1848	0.0085
44	0.0044	0.1934	0.0086
45	0.0045	0.2022	0.0088



**THE OTIS BOOTH RESIDENCE TRUST
STREAM DEPLETION ANALYSIS FOR RENTAL OF 37-7059**



THE OTIS BOOTH RESIDENCE TRUST
STREAM DEPLETION ANALYSIS FOR WSB RENTAL OF 37-7059

OTIS BOOTH RESIDENCE TRUST WSB RENTAL APPLICATION
AWAS OUTPUT- 4/7/16 BROCKWAY ENGINEERING PLLC

Booth				Hubbard Well 1				Hubbard Well 2				Results			
Time	Dep. Rate (cfs)	Vol. of Dep. (ac-ft)	Vol. of Dep. This Step (ac-ft)	Time	Dep. Rate (cfs)	Vol. of Dep. (ac-ft)	Vol. of Dep. This Step (ac-ft)	Time	Dep. Rate (cfs)	Vol. of Dep. (ac-ft)	Vol. of Dep. This Step (ac-ft)	M 1+2 cfs	M 1+2 vol	Diff. cfs	
15-Apr	1	0.0001	0.0002	0.0002	1	0	0	0	1	0	0	0	0	0	-0.0001
16-Apr	2	0.0002	0.0006	0.0004	2	0	0	0	2	0	0	0	0	0	-0.0002
17-Apr	3	0.0003	0.0012	0.0006	3	0	0.0001	0	3	0	0	0	0.0001	0.0001	-0.0001
18-Apr	4	0.0004	0.002	0.0008	4	0	0.0001	0.0001	4	0	0	0	0	0.0001	-0.0004
19-Apr	5	0.0005	0.0029	0.001	5	0.0001	0.0002	0.0001	5	0	0.0001	0	0.0001	0.0003	-0.0004
20-Apr	6	0.0006	0.0041	0.0012	6	0.0001	0.0004	0.0001	6	0	0.0001	0	0.0001	0.0005	-0.0005
21-Apr	7	0.0007	0.0054	0.0013	7	0.0001	0.0006	0.0002	7	0	0.0002	0.0001	0.0001	0.0008	-0.0006
22-Apr	8	0.0008	0.007	0.0015	8	0.0001	0.0008	0.0002	8	0.0001	0.0003	0.0001	0.0001	0.0011	-0.0006
23-Apr	9	0.0009	0.0087	0.0017	9	0.0002	0.0011	0.0003	9	0.0001	0.0004	0.0001	0.0003	0.0015	-0.0006
24-Apr	10	0.001	0.0106	0.0019	10	0.0002	0.0014	0.0003	10	0.0001	0.0005	0.0001	0.0003	0.0019	-0.0007
25-Apr	11	0.0011	0.0127	0.0021	11	0.0002	0.0018	0.0004	11	0.0001	0.0007	0.0002	0.0003	0.0025	-0.0008
26-Apr	12	0.0012	0.015	0.0023	12	0.0002	0.0023	0.0004	12	0.0001	0.0009	0.0002	0.0003	0.0032	-0.0009
27-Apr	13	0.0013	0.0175	0.0025	13	0.0003	0.0028	0.0005	13	0.0001	0.0012	0.0003	0.0004	0.004	-0.0009
28-Apr	14	0.0014	0.0202	0.0027	14	0.0003	0.0033	0.0006	14	0.0002	0.0015	0.0003	0.0005	0.0048	-0.0009
29-Apr	15	0.0015	0.0231	0.0029	15	0.0003	0.0039	0.0006	15	0.0002	0.0018	0.0003	0.0005	0.0057	-0.0010
30-Apr	16	0.0016	0.0262	0.0031	16	0.0004	0.0046	0.0007	16	0.0002	0.0022	0.0004	0.0006	0.0068	-0.0010
1-May	17	0.0017	0.0295	0.0033	17	0.0004	0.0054	0.0008	17	0.0002	0.0026	0.0004	0.0006	0.008	-0.0011
2-May	18	0.0018	0.033	0.0035	18	0.0004	0.0062	0.0008	18	0.0002	0.003	0.0005	0.0006	0.0092	-0.0012
3-May	19	0.0019	0.0366	0.0037	19	0.0005	0.0071	0.0009	19	0.0003	0.0035	0.0005	0.0008	0.0106	-0.0011
4-May	20	0.002	0.0405	0.0039	20	0.0005	0.008	0.001	20	0.0003	0.0041	0.0006	0.0008	0.0121	-0.0012
5-May	21	0.0021	0.0446	0.0041	21	0.0005	0.0091	0.001	21	0.0003	0.0047	0.0006	0.0008	0.0138	-0.0013
6-May	22	0.0022	0.0489	0.0043	22	0.0006	0.0101	0.0011	22	0.0003	0.0053	0.0007	0.0009	0.0154	-0.0013
7-May	23	0.0023	0.0533	0.0045	23	0.0006	0.0113	0.0012	23	0.0004	0.0061	0.0007	0.001	0.0174	-0.0013
8-May	24	0.0024	0.058	0.0047	24	0.0006	0.0125	0.0012	24	0.0004	0.0068	0.0008	0.001	0.0193	-0.0014
9-May	25	0.0025	0.0629	0.0049	25	0.0007	0.0139	0.0013	25	0.0004	0.0076	0.0008	0.0011	0.0215	-0.0014
10-May	26	0.0026	0.068	0.0051	26	0.0007	0.0152	0.0014	26	0.0005	0.0085	0.0009	0.0012	0.0237	-0.0014
11-May	27	0.0027	0.0732	0.0053	27	0.0008	0.0167	0.0015	27	0.0005	0.0094	0.0009	0.0013	0.0261	-0.0014
12-May	28	0.0028	0.0787	0.0055	28	0.0008	0.0183	0.0015	28	0.0005	0.0104	0.001	0.0013	0.0287	-0.0015
13-May	29	0.0029	0.0844	0.0057	29	0.0008	0.0199	0.0016	29	0.0005	0.0114	0.001	0.0013	0.0313	-0.0016
14-May	30	0.003	0.0903	0.0059	30	0.0009	0.0216	0.0017	30	0.0006	0.0125	0.0011	0.0015	0.0341	-0.0015
15-May	31	0.0031	0.0964	0.0061	31	0.0009	0.0234	0.0018	31	0.0006	0.0137	0.0012	0.0015	0.0371	-0.0016
16-May	32	0.0032	0.1027	0.0063	32	0.001	0.0252	0.0019	32	0.0006	0.0149	0.0012	0.0016	0.0401	-0.0016
17-May	33	0.0033	0.1092	0.0065	33	0.001	0.0272	0.0019	33	0.0007	0.0162	0.0013	0.0017	0.0434	-0.0016
18-May	34	0.0034	0.1158	0.0067	34	0.001	0.0292	0.002	34	0.0007	0.0175	0.0013	0.0017	0.0467	-0.0017
19-May	35	0.0035	0.1227	0.0069	35	0.0011	0.0313	0.0021	35	0.0007	0.019	0.0014	0.0018	0.0503	-0.0017
20-May	36	0.0036	0.1298	0.0071	36	0.0011	0.0335	0.0022	36	0.0008	0.0204	0.0015	0.0019	0.0539	-0.0017
21-May	37	0.0037	0.1371	0.0073	37	0.0012	0.0358	0.0023	37	0.0008	0.022	0.0015	0.002	0.0578	-0.0017
22-May	38	0.0038	0.1445	0.0075	38	0.0012	0.0381	0.0024	38	0.0008	0.0236	0.0016	0.002	0.0617	-0.0018
23-May	39	0.0039	0.1522	0.0077	39	0.0013	0.0406	0.0024	39	0.0009	0.0253	0.0017	0.0022	0.0659	-0.0017
24-May	40	0.004	0.16	0.0079	40	0.0013	0.0431	0.0025	40	0.0009	0.027	0.0018	0.0022	0.0701	-0.0018
25-May	41	0.0041	0.1681	0.0081	41	0.0013	0.0457	0.0026	41	0.0009	0.0289	0.0018	0.0022	0.0746	-0.0019
26-May	42	0.0042	0.1763	0.0082	42	0.0014	0.0484	0.0027	42	0.001	0.0307	0.0019	0.0024	0.0791	-0.0018
27-May	43	0.0043	0.1848	0.0085	43	0.0014	0.0512	0.0028	43	0.001	0.0327	0.002	0.0024	0.0839	-0.0019
28-May	44	0.0044	0.1934	0.0086	44	0.0015	0.0541	0.0029	44	0.001	0.0347	0.002	0.0025	0.0888	-0.0019
29-May	45	0.0045	0.2023	0.0088	45	0.0015	0.057	0.003	45	0.0011	0.0368	0.0021	0.0026	0.0938	-0.0019
30-May	46	0.0046	0.2113	0.009	46	0.0016	0.0601	0.0031	46	0.0011	0.039	0.0022	0.0027	0.0991	-0.0019
31-May	47	0.0047	0.2205	0.0092	47	0.0016	0.0632	0.0031	47	0.0012	0.0413	0.0022	0.0028	0.1045	-0.0019
1-Jun	48	0.0048	0.23	0.0094	48	0.0017	0.0665	0.0032	48	0.0012	0.0436	0.0023	0.0029	0.1101	-0.0019
2-Jun	49	0.0049	0.2396	0.0096	49	0.0017	0.0698	0.0033	49	0.0012	0.046	0.0024	0.0029	0.1158	-0.0020
3-Jun	50	0.005	0.2494	0.0098	50	0.0017	0.0732	0.0034	50	0.0013	0.0485	0.0025	0.003	0.1217	-0.0020
4-Jun	51	0.0051	0.2594	0.01	51	0.0018	0.0767	0.0035	51	0.0013	0.051	0.0025	0.0031	0.1277	-0.0020
5-Jun	52	0.0052	0.2697	0.0102	52	0.0018	0.0803	0.0036	52	0.0013	0.0536	0.0026	0.0031	0.1339	-0.0021
6-Jun	53	0.0053	0.2801	0.0104	53	0.0019	0.084	0.0037	53	0.0014	0.0563	0.0027	0.0033	0.1403	-0.0020
7-Jun	54	0.0054	0.2907	0.0106	54	0.0019	0.0877	0.0038	54	0.0014	0.0591	0.0028	0.0033	0.1468	-0.0021
8-Jun	55	0.0055	0.3015	0.0108	55	0.002	0.0916	0.0039	55	0.0015	0.062	0.0029	0.0035	0.1536	-0.0020
9-Jun	56	0.0056	0.3125	0.011	56	0.002	0.0956	0.004	56	0.0015	0.0649	0.0029	0.0035	0.1605	-0.0021
10-Jun	57	0.0057	0.3237	0.0112	57	0.0021	0.0996	0.0041	57	0.0015	0.0679	0.003	0.0036	0.1675	-0.0021
11-Jun	58	0.0058	0.3352	0.0114	58	0.0021	0.1038	0.0041	58	0.0016	0.071	0.0031	0.0037	0.1748	-0.0021
12-Jun	59	0.0059	0.3468	0.0116	59	0.0022	0.108	0.0042	59	0.0016	0.0742	0.0032	0.0038	0.1822	-0.0021
13-Jun	60	0.006	0.3586	0.0118	60	0.0022	0.1124	0.0043	60	0.0017	0.0775	0.0033	0.0039	0.1899	-0.0021
14-Jun	61	0.0061	0.3706	0.0121	61	0.0023	0.1168	0.0044	61	0.0017	0.0808	0.0033	0.004	0.1976	-0.0021
15-Jun	62	0.0062	0.3828	0.0122	62	0.0023	0.1213	0.0045	62	0.0017	0.0842	0.0034	0.004	0.2055	-0.0022
16-Jun	63	0.0063	0.3951	0.0124	63	0.0024	0.1259	0.0046	63	0.0018	0.0877	0.0035	0.0042	0.2136	-0.0021
17-Jun	64	0.0064	0.4077	0.0125	64	0.0024	0.1306	0.0047	64	0.0018	0.0913	0.0036	0.0042	0.2219	-0.0021
18-Jun	65	0.0064	0.4204	0.0127	65	0.0024	0.1355	0.0048	65	0.0019	0.095	0.0037	0.0043	0.2305	-0.0021
19-Jun	66	0.0065	0.4332	0.0129	66	0.0025	0.1403	0.0049	66	0.0019	0.0987	0.0037	0.0044	0.239	-0.0021
20-Jun	67	0.0066	0.4463	0.013	67	0.0025	0.1453	0.005	67	0.002	0.1026	0.0038	0.0045	0.2479	-0.0021
21-Jun	68	0.0067	0.4594	0.0132	68	0.0026	0.1504	0.0051	68	0.002	0.1065	0.0039	0.0046	0.2569	-0.0021
22-Jun	69	0.0068	0.4728	0.0133	69	0.0026	0.1556	0.0052	69	0.002	0.1105	0.004	0.0046	0.2661	-0.0022
23-Jun	70	0.0068	0.4863	0.0135	70	0.0027	0.1608	0.0052	70	0.0021	0.1145	0.0041	0.0048	0.2753	-0.0020
24-Jun	71	0.0069	0.4999	0.0136	71	0.0027	0.1661	0.0053	71	0.0021	0.1187	0.0042	0.0048	0.2848	-0.0021
25-Jun	72	0.007	0.5137	0.0138	72	0.0028	0.1716	0.0054	72	0.0022	0.1229	0.0042	0.005	0.2945	-0.0020
26-Jun	73	0.0071	0.5277	0.014	73	0.0028	0.1771	0.0055	73	0.0022	0.1272	0.0043	0.005	0.3043	-0.0021
27-Jun	74	0.0071	0.5418	0.0141	74	0.0028	0.1827	0.0056							

Booth					Hubbard Well 1					Hubbard Well 2					Results			
Time	Dep. Rate (cfs)	Vol. of Dep. (ac-ft)	Vol. of Dep. This Step (ac-ft)		Time	Dep. Rate (cfs)	Vol. of Dep. (ac-ft)	Vol. of Dep. This Step (ac-ft)		Time	Dep. Rate (cfs)	Vol. of Dep. (ac-ft)	Vol. of Dep. This Step (ac-ft)		H 1+2 cfs	H 1+2 vol	Diff. cfs	
17-Jul	94	0.0085	0.8559	0.0169	94	0.0037	0.3119	0.0072		94	0.003	0.236	0.006		0.0067	0.5479	-0.0018	
18-Jul	95	0.0085	0.8728	0.0168	95	0.0037	0.3192	0.0073		95	0.0031	0.2421	0.006		0.0068	0.5613	-0.0017	
19-Jul	96	0.0085	0.8896	0.0168	96	0.0037	0.3266	0.0074		96	0.0031	0.2482	0.0061		0.0068	0.5748	-0.0017	
20-Jul	97	0.0084	0.9063	0.0167	97	0.0037	0.334	0.0074		97	0.0031	0.2544	0.0062		0.0068	0.5884	-0.0016	
21-Jul	98	0.0084	0.9229	0.0167	98	0.0038	0.3414	0.0074		98	0.0032	0.2606	0.0062		0.007	0.602	-0.0014	
22-Jul	99	0.0084	0.9395	0.0165	99	0.0038	0.3489	0.0075		99	0.0032	0.2669	0.0063		0.007	0.6158	-0.0014	
23-Jul	100	0.0083	0.9561	0.0165	100	0.0038	0.3564	0.0075		100	0.0032	0.2733	0.0064		0.007	0.6297	-0.0013	
24-Jul	101	0.0083	0.9728	0.0164	101	0.0038	0.364	0.0075		101	0.0032	0.2797	0.0064		0.007	0.6437	-0.0013	
25-Jul	102	0.0082	0.9898	0.0164	102	0.0038	0.3715	0.0076		102	0.0033	0.2861	0.0064		0.0071	0.6576	-0.0011	
26-Jul	103	0.0082	1.0051	0.0163	103	0.0038	0.3791	0.0076		103	0.0033	0.2926	0.0065		0.0071	0.6717	-0.0011	
27-Jul	104	0.0082	1.0213	0.0162	104	0.0038	0.3867	0.0076		104	0.0033	0.2991	0.0065		0.0071	0.6858	-0.0011	
28-Jul	105	0.0081	1.0374	0.0161	105	0.0038	0.3943	0.0076		105	0.0033	0.3057	0.0066		0.0071	0.7	-0.0010	
29-Jul	106	0.0081	1.0535	0.016	106	0.0038	0.4019	0.0076		106	0.0033	0.3123	0.0066		0.0071	0.7142	-0.0010	
30-Jul	107	0.008	1.0694	0.016	107	0.0038	0.4095	0.0076		107	0.0034	0.319	0.0066		0.0072	0.7285	-0.0008	
31-Jul	108	0.008	1.0853	0.0159	108	0.0038	0.4171	0.0076		108	0.0034	0.3256	0.0067		0.0072	0.7427	-0.0008	
1-Aug	109	0.0079	1.1011	0.0158	109	0.0038	0.4247	0.0076		109	0.0034	0.3323	0.0067		0.0072	0.757	-0.0007	
2-Aug	110	0.0079	1.1168	0.0157	110	0.0038	0.4324	0.0076		110	0.0034	0.339	0.0067		0.0072	0.7714	-0.0007	
3-Aug	111	0.0079	1.1324	0.0156	111	0.0038	0.44	0.0076		111	0.0034	0.3458	0.0067		0.0072	0.7858	-0.0007	
4-Aug	112	0.0078	1.148	0.0155	112	0.0038	0.4476	0.0076		112	0.0034	0.3526	0.0068		0.0072	0.8002	-0.0006	
5-Aug	113	0.0078	1.1634	0.0154	113	0.0038	0.4553	0.0076		113	0.0034	0.3594	0.0068		0.0072	0.8147	-0.0006	
6-Aug	114	0.0077	1.1788	0.0154	114	0.0038	0.4629	0.0076		114	0.0034	0.3662	0.0068		0.0072	0.8291	-0.0005	
7-Aug	115	0.0077	1.194	0.0153	115	0.0038	0.4705	0.0076		115	0.0034	0.373	0.0068		0.0072	0.8435	-0.0005	
8-Aug	116	0.0076	1.2092	0.0152	116	0.0038	0.4781	0.0076		116	0.0035	0.3798	0.0068		0.0073	0.8579	-0.0003	
9-Aug	117	0.0076	1.2243	0.0151	117	0.0038	0.4857	0.0076		117	0.0035	0.3867	0.0069		0.0073	0.8724	-0.0003	
10-Aug	118	0.0075	1.2393	0.015	118	0.0038	0.4933	0.0076		118	0.0035	0.3935	0.0069		0.0073	0.8868	-0.0002	
11-Aug	119	0.0075	1.2542	0.0149	119	0.0038	0.5009	0.0076		119	0.0035	0.4004	0.0069		0.0073	0.9013	-0.0002	
12-Aug	120	0.0075	1.269	0.0148	120	0.0038	0.5085	0.0076		120	0.0035	0.4073	0.0069		0.0073	0.9158	-0.0002	
13-Aug	121	0.0074	1.2838	0.0147	121	0.0038	0.516	0.0076		121	0.0035	0.4142	0.0069		0.0073	0.9302	-0.0001	
14-Aug	122	0.0074	1.2984	0.0146	122	0.0038	0.5236	0.0075		122	0.0035	0.4211	0.0069		0.0073	0.9447	-0.0001	
15-Aug	123	0.0073	1.3129	0.0145	123	0.0038	0.5311	0.0075		123	0.0035	0.428	0.0069		0.0073	0.9591	0.0000	
16-Aug	124	0.0073	1.3274	0.0144	124	0.0038	0.5386	0.0075		124	0.0035	0.4349	0.0069		0.0073	0.9735	0.0000	
17-Aug	125	0.0072	1.3416	0.0143	125	0.0038	0.5461	0.0075		125	0.0035	0.4419	0.0069		0.0073	0.988	0.0001	
18-Aug	126	0.0071	1.3558	0.0141	126	0.0038	0.5535	0.0075		126	0.0035	0.4488	0.0069		0.0073	1.0023	0.0002	
19-Aug	127	0.007	1.3697	0.014	127	0.0037	0.561	0.0074		127	0.0035	0.4557	0.0069		0.0072	1.0167	0.0002	
20-Aug	128	0.0069	1.3836	0.0138	128	0.0037	0.5683	0.0074		128	0.0035	0.4626	0.0069		0.0072	1.0309	0.0003	
21-Aug	129	0.0069	1.3972	0.0137	129	0.0037	0.5757	0.0074		129	0.0035	0.4693	0.0069		0.0072	1.0452	0.0003	
22-Aug	130	0.0068	1.4107	0.0135	130	0.0037	0.583	0.0073		130	0.0035	0.4764	0.0069		0.0072	1.0594	0.0004	
23-Aug	131	0.0067	1.4241	0.0133	131	0.0037	0.5903	0.0073		131	0.0035	0.4833	0.0069		0.0072	1.0736	0.0005	
24-Aug	132	0.0066	1.4373	0.0132	132	0.0036	0.5975	0.0072		132	0.0035	0.4902	0.0069		0.0071	1.0877	0.0005	
25-Aug	133	0.0065	1.4503	0.013	133	0.0036	0.6047	0.0072		133	0.0035	0.497	0.0069		0.0071	1.1017	0.0006	
26-Aug	134	0.0065	1.4631	0.0129	134	0.0036	0.6119	0.0071		134	0.0034	0.5039	0.0068		0.007	1.1158	0.0005	
27-Aug	135	0.0064	1.4758	0.0127	135	0.0036	0.619	0.0071		135	0.0034	0.5107	0.0068		0.007	1.1297	0.0006	
28-Aug	136	0.0063	1.4883	0.0125	136	0.0035	0.626	0.0071		136	0.0034	0.5175	0.0068		0.0069	1.1435	0.0006	
29-Aug	137	0.0062	1.5007	0.0124	137	0.0035	0.633	0.007		137	0.0034	0.5242	0.0068		0.0069	1.1572	0.0007	
30-Aug	138	0.0061	1.5129	0.0122	138	0.0035	0.64	0.0069		138	0.0034	0.531	0.0068		0.0069	1.171	0.0008	
31-Aug	139	0.006	1.525	0.012	139	0.0035	0.6469	0.0069		139	0.0034	0.5377	0.0067		0.0069	1.1846	0.0009	
1-Sep	140	0.006	1.5368	0.0119	140	0.0034	0.6537	0.0068		140	0.0034	0.5444	0.0067		0.0068	1.1981	0.0008	
2-Sep	141	0.0059	1.5486	0.0117	141	0.0034	0.6605	0.0068		141	0.0034	0.5511	0.0067		0.0068	1.2116	0.0009	
3-Sep	142	0.0058	1.5601	0.0115	142	0.0034	0.6673	0.0067		142	0.0033	0.5577	0.0066		0.0067	1.2249	0.0009	
4-Sep	143	0.0057	1.5715	0.0114	143	0.0033	0.6739	0.0067		143	0.0033	0.5643	0.0066		0.0066	1.2382	0.0009	
5-Sep	144	0.0056	1.5827	0.0112	144	0.0033	0.6805	0.0066		144	0.0033	0.5709	0.0066		0.0066	1.2514	0.0010	
6-Sep	145	0.0055	1.5938	0.011	145	0.0033	0.6871	0.0066		145	0.0033	0.5774	0.0065		0.0066	1.2645	0.0011	
7-Sep	146	0.0055	1.6046	0.0109	146	0.0033	0.6935	0.0065		146	0.0033	0.5839	0.0065		0.0066	1.2774	0.0011	
8-Sep	147	0.0054	1.6153	0.0107	147	0.0032	0.7	0.0064		147	0.0033	0.5904	0.0065		0.0065	1.2904	0.0011	
9-Sep	148	0.0053	1.6259	0.0105	148	0.0032	0.7063	0.0064		148	0.0032	0.5968	0.0064		0.0064	1.3031	0.0011	
10-Sep	149	0.0052	1.6363	0.0104	149	0.0032	0.7126	0.0063		149	0.0032	0.6032	0.0064		0.0064	1.3158	0.0012	
11-Sep	150	0.0051	1.6465	0.0102	150	0.0031	0.7189	0.0062		150	0.0032	0.6096	0.0063		0.0063	1.3285	0.0012	
12-Sep	151	0.005	1.6565	0.01	151	0.0031	0.725	0.0062		151	0.0032	0.6159	0.0063		0.0063	1.3409	0.0013	
13-Sep	152	0.0049	1.6664	0.0099	152	0.0031	0.7311	0.0061		152	0.0031	0.6222	0.0063		0.0062	1.3533	0.0013	
14-Sep	153	0.0049	1.6761	0.0097	153	0.003	0.7372	0.006		153	0.0031	0.6284	0.0062		0.0061	1.3656	0.0012	
15-Sep	154	0.0048	1.6856	0.0095	154	0.003	0.7432	0.006		154	0.0031	0.6345	0.0062		0.0061	1.3777	0.0013	
16-Sep	155	0.0047	1.695	0.0093	155	0.003	0.749	0.0059		155	0.0031	0.6407	0.0061		0.0061	1.3897	0.0014	
17-Sep	156	0.0046	1.7041	0.0091	156	0.0029	0.7549	0.0058		156	0.0031	0.6468	0.0061		0.006	1.4017	0.0014	
18-Sep	157	0.0044	1.713	0.0089	157	0.0029	0.7606	0.0058		157	0.003	0.6528	0.006		0.0059	1.4134	0.0015	
19-Sep	158	0.0043	1.7216	0.0086	158	0.0028	0.7663	0.0057		158	0.003	0.6588	0.006		0.0058	1.4251	0.0015	
20-Sep	159	0.0042	1.73	0.0084	159	0.0028	0.7719	0.0056		159	0.003	0.6647	0.0059		0.0058	1.4366	0.0016	
21-Sep	160	0.0041	1.7382	0.0082	160	0.0028	0.7774	0.0055		160	0.0029	0.6706	0.0059		0.0057	1.448	0.0016	
22-Sep	161	0.004	1.7461	0.0079	161	0.0027	0.7828	0.0054		161	0.0029	0.6764	0.0058		0.0056	1.4592	0.0016	
23-Sep	162	0.0038	1.7538	0.0077														

Booth				Hubbard Well 1				Hubbard Well 2				Results			
	Dep. Rate (cfs)	Vol. of Dep. (ac-ft)	Vol. of Dep. This Step (ac-ft)		Dep. Rate (cfs)	Vol. of Dep. (ac-ft)	Vol. of Dep. This Step (ac-ft)		Dep. Rate (cfs)	Vol. of Dep. (ac-ft)	Vol. of Dep. This Step (ac-ft)	H 1+2 cfs	H 1+2 vol	Diff. cfs	
Time				Time				Time							
19-Oct	188	0.0009	1.8694	0.0018	188	0.0013	0.8914	0.0027	188	0.0018	0.8058	0.0037	0.0031	1.6972	0.0022
20-Oct	189	0.0009	1.8712	0.0017	189	0.0013	0.894	0.0026	189	0.0018	0.8094	0.0036	0.0031	1.7034	0.0022
21-Oct	190	0.0008	1.8728	0.0017	190	0.0012	0.8964	0.0025	190	0.0018	0.8129	0.0035	0.003	1.7093	0.0022
22-Oct	191	0.0008	1.8744	0.0016	191	0.0012	0.8988	0.0024	191	0.0017	0.8164	0.0035	0.0029	1.7152	0.0021
23-Oct	192	0.0007	1.8759	0.0015	192	0.0011	0.9012	0.0023	192	0.0017	0.8198	0.0034	0.0028	1.721	0.0021
24-Oct	193	0.0007	1.8773	0.0014	193	0.0011	0.9034	0.0022	193	0.0016	0.8231	0.0033	0.0027	1.7265	0.0020
25-Oct	194	0.0007	1.8786	0.0013	194	0.0011	0.9056	0.0022	194	0.0016	0.8263	0.0032	0.0027	1.7319	0.0020
26-Oct	195	0.0006	1.8799	0.0012	195	0.001	0.9077	0.0021	195	0.0016	0.8295	0.0032	0.0026	1.7372	0.0020
27-Oct	196	0.0006	1.881	0.0012	196	0.001	0.9097	0.002	196	0.0015	0.8325	0.0031	0.0025	1.7422	0.0019
28-Oct	197	0.0005	1.8821	0.0011	197	0.001	0.9116	0.002	197	0.0015	0.8356	0.003	0.0025	1.7472	0.0020
29-Oct	198	0.0005	1.8831	0.001	198	0.0009	0.9135	0.0019	198	0.0015	0.8385	0.0029	0.0024	1.752	0.0019
30-Oct	199	0.0005	1.884	0.0009	199	0.0009	0.9154	0.0018	199	0.0014	0.8414	0.0029	0.0023	1.7568	0.0018
31-Oct	200	0.0004	1.8849	0.0009	200	0.0009	0.9171	0.0018	200	0.0014	0.8442	0.0028	0.0023	1.7613	0.0019



RECORDING REQUESTED BY

Thomas F. Reed

AND WHEN RECORDED MAIL THIS AFFIDAVIT AND,
UNLESS OTHERWISE SHOWN BELOW, MAIL
TAX STATEMENTS TO:

NAME Lynn Allan Booth, Trustee

ADDRESS 10431 Bellagio Road

CITY &
STATE Los Angeles, CA 90077

DEC 07, 2012 9:58 AM

OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
Ernest J. Dronenburg, Jr., COUNTY RECORDER
FEES: 39.00
OC: AFNF

PAGES: 2



Affidavit of Change of Trustee

APN: 155-010-05-00

The following statements are being made under oath pursuant to California Probate Code Sections 18105 *et. seq.*

Lynn Allan Booth, of legal age, being first duly sworn, states:

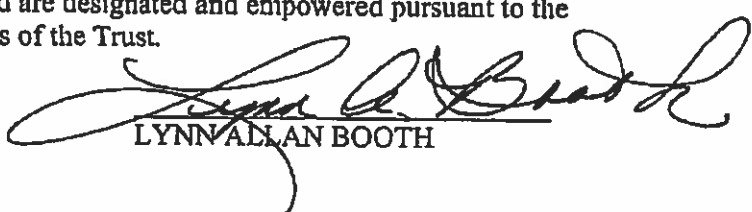
1. Charles T. Munger has been acting as Co-Trustee of the Residence Trust established pursuant to the Otis Booth Living Trust dated March 19, 2002 (the "Trust") with Loren Booth and Palmer Murray.
2. Charles T. Munger has resigned as Co-Trustee of the Trust.
3. Pursuant to Section 10.1 of the Trust, Lynn Allan Booth succeeds Charles T. Munger as Co-Trustee of the Trust and is now acting as Co-Trustee of the Trust with Loren Booth and Palmer Murray.
4. At the time of his resignation, Charles T. Munger was the owner, as Trustee, of certain real property acquired by a Trust Transfer Deed recorded on November 12, 2008, as instrument number 2008-0588020, in the Official Records of San Diego County Recorder's Office, covering the following described property situated in the City of Oceanside, County of San Diego, State of California:

Lots 58, 59 and 60 in Block "F" of Ocean Front Addition to the City of Oceanside, in the City of Oceanside, County of San Diego, State of California, according to map thereof No. 909, filed in the Office of the County Recorder of San Diego County on June 8, 1904.

Commonly known as 2027 S. Pacific St., Oceanside, CA 92054

7. Accordingly, Lynn Allan Booth, Loren Booth and Palmer Murray are now the Co-Trustees of the Trust under which Charles T. Munger held title as Trustee pursuant to the Trust Transfer Deed described above, and are designated and empowered pursuant to the terms of the Trust to serve as Co-Trustees of the Trust.

Dated: 11/27/12, 2012

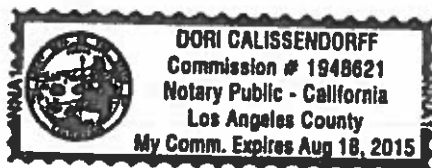

LYNN ALLAN BOOTH

STATE OF CALIFORNIA }
 } SS.
COUNTY OF Los Angeles }

Subscribed and sworn to (or affirmed) before me on this 27th day of November, 2012, by Lynn Allan Booth, proved to me on the basis of satisfactory evidence to be the person who appeared before me.

(Seal)

Dori Calissendorff
Notary Signature



[Affidavit of Change of Trustee]

NOTICE OF RESIGNATION OF TRUSTEE

BOOTH RESIDENCE TRUST

The undersigned trustee of the Booth Residence Trust, UAD March 19, 2002, hereby resigns as trustee of said trust in favor of Lynn Booth, Loren Booth and Palmer Murray, who are designated successor trustees under paragraph 10.1 of the trust instrument, effective thirty days after the service or mailing of this notice to the beneficiaries of the trust.

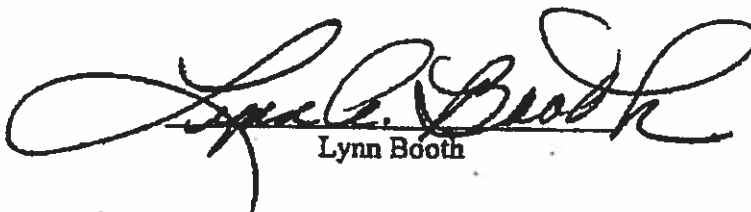
Dated: July 2, 2012


Charles T. Munger

ACCEPTANCE OF SUCCESSOR TRUSTEES

The undersigned hereby accept the appointment as successor trustees of the Booth Residence Trust.

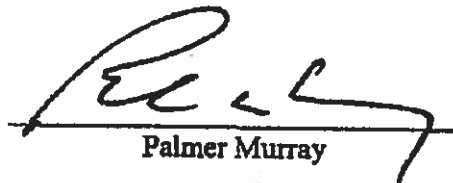
Dated: 6/29/2012


Lynn Booth

Dated: 6/29/2012


Loren Booth

Dated: 6/29/2012


Palmer Murray

OTIS BOOTH LIVING TRUST

ARTICLE 10

SUCCESSOR TRUSTEE

10.1 Designated Successor Trustee. If the Trustee named in this Trust Agreement shall become unable to serve or otherwise cease to act as Trustee hereunder, then CHARLES T. MUNGER shall act as successor Trustee hereunder, provided that CHARLES T. MUNGER shall have the power to designate, and to remove, one or more persons to serve with him as a Co-Trustee during the period that he serves as a Trustee hereunder. If CHARLES T. MUNGER shall fail to qualify, become unable to serve or otherwise ceases to act as Trustee hereunder, then I nominate LOREN BOOTH and PALMER MURRAY as Co-Trustees. If either of them shall fail to qualify, become unable to serve or otherwise cease to act hereunder, I nominate JEFFREY McDERMOTT as successor Co-Trustee.

LYNN ALLAN BOOTH shall also serve as a successor Co-Trustee to CHARLES T. MUNGER of the Marital Trust, the Ranch Trust and the Residence Trust provided for in Article 4 above.

Notwithstanding the foregoing, during the lifetime of the Grantor, LYNN ALLAN BOOTH shall serve as a Co-Trustee for the sole purpose of acting as the signatory on accounts within the purview of Paragraph 11.19.

10.2 Power to Designate Successor Trustee. If, at any time, any individual is named as a Trustee hereunder and there is no named successor Trustee to that individual or the named successor is then unavailable to act as Trustee hereunder, then, that individual shall have the power:

(a) to designate one or more successor Trustees or Co-Trustees who shall act as Trustee or Co-Trustees hereunder, as the case may be, in the order designated, if and when that individual ceases to act as Trustee hereunder, or

(b) to designate a Co-Trustee to serve only with such individual, which designation shall provide that such designated Co-Trustee shall be deemed to resign and shall cease to serve as Co-Trustee if, as and when the individual who designated him ceases to serve as Co-Trustee.

If, at any time, any individual is named as a Trustee hereunder and there is a named successor Trustee or Trustees, that individual shall have the foregoing power:

(x) contingent upon such named successor(s) not being available to serve as Trustee at the time needed, or

(y) when such named successor(s) ceases to act as Trustee hereunder.

The foregoing power may be exercised by a Trustee by giving written notice of the designation of a successor Trustee to the then-living adult Beneficiaries and the

conclusively deemed given seventy-two (72) hours after the deposit thereof in the United States mail. If such notice, demand or other communication is served by telegraph or if by other carrier service, it shall be conclusively deemed given upon confirmation of delivery by the carrier. If such notice, demand or other communication is served by electronic transmission device, it shall be deemed given seventy-two (72) hours after sending such notice, demand or communication, unless proof of earlier receipt is available. Any notice, demand or other communication to be given hereunder shall be addressed to the party to whom such notice, demand or other communication is to be given at the last known address for that party. Any party hereto may change its address for the purpose of receiving notices, demands and other communications as herein provided by a written notice given in the manner aforesaid to the Trustee hereof.

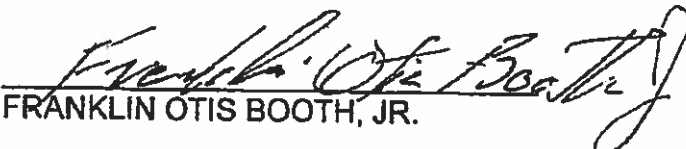
ARTICLE 16

EXECUTION

16.1 Declaration of Grantor. The undersigned Grantor does hereby certify that he has read this Trust Agreement and it fully and accurately sets out the terms, Trusts and conditions under which the Trust Estate herein described is to be held, managed and disposed of by the Trustee herein named, and he hereby approves, ratifies and confirms this Trust Agreement in all particulars.

16.2 Execution by Grantor. Executed at Los Angeles, California, on February 8, 2008.

GRANTOR:


FRANKLIN OTIS BOOTH, JR.

16.3 Execution by Trustee. The foregoing Trust Agreement has been accepted by the Trustee thereunder.

TRUSTEE:


FRANKLIN OTIS BOOTH, JR.

ACKNOWLEDGMENT

STATE OF CALIFORNIA)
)
COUNTY OF LOS ANGELES)

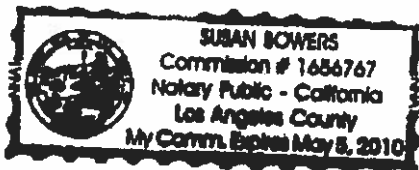
On February 8, 2008, before me, Susan Bowers, personally appeared FRANKLIN OTIS BOOTH, JR., who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Susan Bowers
Signature of Notary Public

(Place Notary Seal Above)





State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

June 14, 2016

OTIS BOOTH RESIDENCE TRUST
C/O LYNN BOOTH CO-TRUSTEE
10431 BELLARIO RD
LOS ANGELES CA 90077

**RE: RENTAL OF WATER FROM THE WATER SUPPLY BANK
WATER RIGHT NO. 37-7059**

Dear Renter:

Please find enclosed a receipt in the amount of **\$12.07** and a copy of a fully executed Water Supply Bank Rental Agreement in connection with the rental of 7.1 acre-feet of water for irrigation of 5.4 acres during 2016. Upon receipt of this fully executed agreement, you are authorized to divert water in compliance with the conditions of water use described in the agreement.

Pursuant to the Water Supply Bank Rules, the rental fee will be retained by the Department to offset administrative costs since you have a private agreement with the lessor of the right.

If you have any questions, please contact this office at (208) 287-4800.

Sincerely,

Water Supply Bank

Enclosures: Receipt No. C102137
Rental Agreement (copy)

c: Sascha Marston – Fiscal
Allen Merritt – IDWR Southern Regional Office
Kevin Lakey – State Water District No. 37
Zach Latham – Brockway Engineering



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

June 7, 2016

OTIS BOOTH RESIDENCE TRUST
C/O LYNN BOOTH CO-TRUSTEE
10431 BELLAGIO RD
LOS ANGELES CA 90077

**RE: APPLICATION TO RENT WATER FROM THE WATER SUPPLY BANK
WATER RIGHT NO. 37-7059**

*****TIME SENSITIVE RESPONSE REQUIRED*****

Dear Applicant:

The Department of Water Resources acknowledges receipt of your application to rent water from the Water Supply Bank. I have enclosed a **Water Supply Bank Rental Agreement for your review and signature**. Upon signature and return of the original agreement, together with the rental fee described below, the Department will also sign the original agreement and return an executed copy to you. Execution of the agreement and compliance with the conditions of approval authorize diversion and use of water as provided in the agreement.

A rental fee of **\$120.70** was calculated based on the current rental rate of \$17.00 per acre-foot times a diversion volume of 7.1 acre-feet. Since you have a private agreement with the lessor, **you are only obligated to pay the 10% administrative fee or \$12.07**. An annual payment shall be received by the Department prior to the execution of this agreement and prior to January 1 in all subsequent years for the duration of the rental period. The agreement will be void if payment is not received prior to the due date in a given year. If you would like to terminate the agreement prior to the end of the rental period, you must submit written notice of your intent to the Department at least 30 days prior to the rental fee due date.

Please send a check for \$12.07 made payable to the Idaho Department of Water Resources, together with the signed rental agreement, within 14 days so I can complete processing.

If you have any questions, please contact me at (208) 287-4918.

Sincerely,

 Remington Buyer
Water Supply Bank Program Coordinator

Enclosure

c: IDWR Front Desk
Zach Latham – Brockway Engineering

MEMORANDUM

To: Water Rights: 37-7059

From: Remington Buyer

Date: June 1, 2016

Re: Review & Analysis of Application to Rent Water from the State Water Supply Bank

PURPOSE/NARRATIVE: On January 13, 2016, Zach Latham of Brockway Engineering submitted a rental application on behalf of Otis Booth Residence Trust. The Trust plans to rent ground water rights from the Bank to irrigate 4.1 acres on a property south of Ketchum. The rental point of diversion is within one hundred feet of the Big Wood River. We assume that the nearness of the rental to the Big Wood River means that the water source is actually ground water tributary to the river and modeling is required to determine those impacts on the river.

AUTHORITY TO FILE: Lynn Booth, Co-Trustee of the Trust signed the application. Documentation is provided confirming Co-Trustee status, no concerns about authority to file the rental application.

WATER RIGHT VALIDITY: This right was decreed in the SRBA on 9/24/2010. It was accepted into the WSB in 2015 and again for the 2016 season. Forfeiture is not an issue.

INJURY ANALYSIS: The rental point of diversion is a 70' deep well located within 100 feet of the Big Wood River while the lease point of diversion is a 80' deep well in the vicinity of Warm Springs Creek. Hydrologic studies of the Big Wood River basin indicate that the valley is primarily an alluvial aquifer and ground water flows do impact surface water sources, hence, the lease location can be considered to be ground water tributary to Warm Springs Creek. Due to the proximity of the rental location to the Big Wood River, AWAS modeling was used to evaluate the rental, to ensure it does not cause excess depletions of the Big Wood River, which would injure the IWRB's minimum stream flow water right and other appropriators.

AWAS modeling indicates that an approximate 2:1 ratio is required to balance river accretions with depletions, with two acre feet of non-pumping of ground water at the lease location sufficiently mitigating for depletions of surface water caused by ground water pumping at the rental location. This rental request is for irrigation of one acre (at 3.5 AF/AC); AWAS modeling indicates that the rental of 0.04 cfs, 7.45 AF and 5.75 acres from leased water right 37-7059 is required to ensure no injury occurs at any time during the irrigation season, however only 0.04 cfs, 7.1 AF and 5.4 acres remain available to be rented from water right 37-7059. Though AWAS modeling indicates that depletions would exceed accretions to the Big Wood River during the month of April, this rental is being approved from June through the end of the irrigation season and so injury should be avoided.

ENLARGEMENT OF USE: No enlargement of the water right is posited through this rental.

LOCAL PUBLIC INTEREST: No information indicates this rental is contrary to the local public interest.

BENEFICIAL USE/CONSERVATION OF WATER RESOURCES: The standard duty of water (0.02 cfs/AC) is being rented, which is consistent with standard beneficial use and the conservation of water resources.

DEPARTMENT STAFF OR WATERMASTER COMMENTS: Comments were requested from both the IDWR regional office, as well as the Water District 37 watermaster. Southern region had no concerns and no response was received from the Water District.

From: Zach Latham [mailto:zach.latham@brockwayeng.com]
Sent: Tuesday, May 03, 2016 4:43 PM
To: Buyer, Remington
Cc: charles.g.brockway@brockwayeng.com
Subject: RE: Otis Booth Rental

Remington-

Our client would like to proceed with the rental of 1.0 acre as requested in our submittal. We can provide a shapefile to IDWR for the area to be irrigated under the rental.

I would like to remind you that I submitted a lengthy analysis that shows no discernable impact to the Big Wood River adjacent to the Booth property as a result of the proposed pumping in the Booth well. The analysis also shows a benefit to and more discharge within the river upstream of the Booth property to the location where the Hubbard pumping impacts Warm Springs Creek. My analysis doesn't seem to have been reviewed or considered at all in the processing of this rental application, why is that?

Thanks for your time.

Zach Latham

Hydrologist
Brockway Engineering, P.L.L.C.
2016 Washington Street North, Suite 4
Twin Falls, ID 83301
t. 208-736-8543
c.208-721-2114
f. 208-736-8506
zach.latham@brockwayeng.com

All information, calculations, maps, drawings, or other documents transmitted via e-mail are preliminary unless explicitly stated in the e-mail text or in the documents themselves.

From: Buyer, Remington [mailto:Remington.Buyer@idwr.idaho.gov]
Sent: Thursday, April 28, 2016 10:09 AM
To: 'Zach Latham'
Cc: charles.g.brockway@brockwayeng.com
Subject: RE: Otis Booth Rental

Zach,

Due to close proximity of the Booth Trust well to the Big Wood River, ground water is accepted to be hydraulically connected to the Big Wood River and any ground water pumping via this well will have a significant impact on Big Wood River stream flows. Moreover, the impact of ground water pumping at the Booth rental location is greater than any equivalent accretion to Warm Springs creek that might be attributable to non-diversion of water under water right 37-7059. AWAS modeling indicates that approximately double the amount of non-pumping at the lease location is required to offset impacts to the Big Wood River at the rental location; that is, 14.9 acre feet of recharge under water right 37-7059 (accomplished through the partial lease of this water right to the Bank) appears to provide sufficient flows to Warm Springs Creek, tributary to the Big Wood River, to offset depletions to the Big Wood River of up to 7 acre feet of ground water pumping at the Booth rental location. Seven acre feet may be sufficient to provide 2 acres of irrigation (at 3.5 AF/AC) and the Bank can proceed with a rental by the Booth Trust of up to seven acre feet, to irrigate two acres, provided your client informs us as to which 2 acres they would like to irrigate. A shapefile is requested to identify the acres requested to be irrigated under the rental.

Remington Buyer
Water Supply Bank Coordinator

Idaho Department of Water Resources
322 East Front Street, Boise, ID, 83720
T: (208) 287-4918 | F: (208) 287-6700

From: Zach Latham [<mailto:zach.latham@brockwayeng.com>]
Sent: Wednesday, April 27, 2016 4:47 PM
To: Buyer, Remington
Cc: charles.g.brockway@brockwayeng.com
Subject: RE: Otis Booth Rental

Remington,
Thank you for your email. First off, this is a ground water to ground water lease and rental request, so I am a little confused by your response. Are you intimating that we can irrigate 1.0 acre on the Booth property with a diversion volume of 3.6 acre-feet exactly as we applied for, or 1.0 acre on the property using some other volume? Thanks for your time.
Zach Latham

Hydrologist
Brockway Engineering, P.L.L.C.
2016 Washington Street North, Suite 4
Twin Falls, ID 83301
t. 208-736-8543
c. 208-721-2114
f. 208-736-8506

zach.latham@brockwayeng.com

All information, calculations, maps, drawings, or other documents transmitted via e-mail are preliminary unless explicitly stated in the e-mail text or in the documents themselves.

From: Buyer, Remington [<mailto:Remington.Buyer@idwr.idaho.gov>]
Sent: Wednesday, April 27, 2016 1:04 PM
To: 'Zach Latham'
Subject: Otis Booth Rental

Zach,

I've reviewed the Otis Booth Trust WSB rental for 2016. The Department's position regarding Big Wood River surface water rentals diverted from ground water wells is that depletions to the river cannot exceed accretions to the river in any month during the season of use. My modeling of the Booth rental using AWAS finds that a 2:1 ratio of leased diversion volume (of water right 37-7059) should suffice to balance accretions and depletions due to ground water pumping at the Booth residence. That is, because the Hubbard water right (37-7059) can provide up to 14.9 acre feet of diversion volume, ground water pumping of up to 7 acre feet (2 acres at 3.5 AF/AC) is possible without injury at the Booth location.

The amended rental request submitted by Brockway Engineering on behalf of the Booth Trust requested one acre of irrigation. Is one acre all your client desires, or would they like to rent water sufficient to irrigate two acres? Please forward to me a shapefile or QQ tabulation of the place of use acres that they would like to irrigate through this rental.

Thanks,

Remington Buyer
Water Supply Bank Coordinator
Idaho Department of Water Resources
322 East Front Street, Boise, ID, 83720
T: (208) 287-4918 | F: (208) 287-6700

Buyer, Remington

From: Merritt, Allen
Sent: Wednesday, May 18, 2016 8:15 AM
To: Buyer, Remington
Subject: RE: WSB Comments

Remington,

I do not have an issue with the draft rental agreement. Seems like a pretty complex analysis for such a small amount of water.

I plan on retiring soon and will leave the office mid June. After that you can contact my replacement who ever that might be.

Cheers

Allen

From: Buyer, Remington
Sent: Tuesday, May 17, 2016 4:49 PM
To: Merritt, Allen
Subject: WSB Comments

Allen,

Are you the correct point of contact for regional comments on WSB transactions? We're transitioning for the summer with water right agents moving to transfers and licensing, so it's just me working in the Bank for the next few months.

Attached are documents for my review of a rental by the Otis Booth Residence Trust in the Wood River Valley. If you are the correct contact, please advise on whether you have any comments, questions or concerns about this rental. Else please forward my request for regional comments on for review.

Thank you,

Remington
287-4918

Buyer, Remington

From: Buyer, Remington
Sent: Tuesday, May 17, 2016 4:29 PM
To: 'Watermstr'
Subject: WSB Rental Request - Otis Booth
Attachments: Review Memo & Draft Rental Agreement.pdf; Rental_Application.pdf; Correspondence.pdf

Kevin, Cyndi,

The Department has reviewed a rental request by the Otis Booth Residence Trust, seeking to rent a portion of water right 37-7059 to authorize irrigation of one acre at the Booth Residence off Wilderness Drive, in Gimlet. The rental application, my correspondence with the consultant and a draft review memo/rental agreement are attached. Effectively, our stream depletion analysis indicates that seven acre feet needs to remain undiverted at the lease location in order to ensure no injury occurs through excess stream depletions at the rental location. Could you please advise me by May 24th whether you have any questions or concerns about this rental?

Thanks,

Remington
287-4918

Buyer, Remington

From: Zach Latham [zach.latham@brockwayeng.com]
Sent: Monday, May 16, 2016 10:25 AM
To: Buyer, Remington
Subject: Otis Booth Residence Trust Shapefile for WSB Rental
Attachments: WSB Shape Booth.zip

Remington-

Please see the attached shapefile associated with the 1.0 acre rental at the Otis Booth Residence Trust property. Please let me know if you need any additional information for rental processing and approval.

Zach Latham

Hydrologist
Brockway Engineering, P.L.L.C.
2016 Washington Street North, Suite 4
Twin Falls, ID 83301
t. 208-736-8543
c.208-721-2114
f. 208-736-8506
zach.latham@brockwayeng.com

All information, calculations, maps, drawings, or other documents transmitted via e-mail are preliminary unless explicitly stated in the e-mail text or in the documents themselves.

From: Amy Runser [<mailto:amy.runser@brockwayeng.com>]
Sent: Monday, May 16, 2016 10:19 AM
To: ZACH.LATHAM@BROCKWAYENG.COM
Subject:

No virus found in this message.

Checked by AVG - www.avg.com

Version: 2016.0.7597 / Virus Database: 4568/12242 - Release Date: 05/16/16



BROCKWAY
ENGINEERING
P.L.L.C.

Hydraulics

Hydrology

Water Resources

RECEIVED

APR 11 2016

DEPARTMENT OF
WATER RESOURCES

April 8th, 2016

Cherie Palmer
Idaho Water Supply Bank
Idaho Department of Water Resources
P.O. Box 83720
Boise, ID 83720-0098

Re: Amended Water Supply Bank Lease and Rental; Portion of 37-7059.

Cherie,

On behalf of The Otis Booth Residence Trust (Trust), Brockway Engineering is submitting a second WSB rental package which proposes to rent 2.8 acres of 37-7059 for the irrigation of 1.0 acre using 9 gpm per acre from an existing well for on the Trust's property south of Ketchum, ID. A March 18th 2016 letter from IDWR notified the Trust that its January 11th 2016 rental application for 11.5 acres of the same right was denied. This denial has necessitated the re-submittal of a second rental application and supporting hydrologic analysis in support of the second rental.

Please copy our office on all correspondence regarding this water supply bank rental application. Thank you for your assistance and if you have questions or comments, please don't hesitate to call.

Regards,

Sheila Daniels on behalf of

Zach Latham, M.S., Hydrologist

Enc: (1) Otis Booth Residence Trust Rental Application and Map.
(6) AWAS Model Output Screen Shots, and 2 Transect Maps.
(1) AWAS Model Output for Hubbard Wells and Trust Well.
(1) Stream Depletion Analysis Memo
(1) Trust's Authorization to Sign Documents.

Cc: The Otis Booth Residence Trust
Britta Hubbard

CHARLES E.
BROCKWAY,
PH.D., P.E.

CHARLES G.
BROCKWAY,
PH.D., P.E.

2016 NORTH
WASHINGTON
STREET • SUITE 4

TWIN FALLS,
IDAHO 83301

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FAX: 736•8506