Appendix 2

BWLWWUA Water Right Diversion Summaries

Little Wood River

Listed by diversion in numerical then alphabetical order

Owner: Uhrig, John
Water Right Number(s): 37-177J (4/1/1883; 0.3 cfs)
Diversion Name: 69-P9A
Field Visit Date: 08/18/2015
Diversion Location: Diversion from Little Wood River about 0.75 miles northwest of Shoshone. Diversion and POU located below Milner Gooding Canal.

Combined/Other Water Rights & Sources: Right 37-177J is for 40.6 acres of irrigation and is not combined with any other rights. It does include conditions about being combined with water from BWCC and AFRD2. IDWR staff found 75 shares listed in BWCC-AFRD2 records for John Uhrig (certificate #12377) which matches the same information provided by BWLWWUA.

Diversion Description: Intake pipe from river to CMP well/standpipe to a 30 HP vertical turbine pump which pressurizes irrigation mainlines to wheel lines and hand lines.

Measuring Device: McCrometer 10 inch propeller meter installed on mainline. McCrometer meters are not on IDWR approved flow meter list but are acceptable if installed prior to IDWR's adoption of new meter standards and/or issuance of measurement orders. Pump was not on at time of visit.

Conveyance & Irrigation System: 10 inch mainline from pump discharges to series of wheel lines and some hand lines on south side of Highway 26 (crop was alfalfa). Total irrigated area from digitizing 2015 NAIP imagery is approximately 44 acres. Water rights are limited to 40.6 acres.

Additional Comments: Up until recently the pump/diversion was shared with WR 37-177K and 37-177L, a new diversion from the river has been installed for these rights and will be called 69-P9B. These rights are split from the same parent right as this right but were not included in the water call.

1. Uhrig pump 69-P9A: CMP well to vertical turbine 30 HP pump, and mainline with 10 inch McCrometer meter.

Owner: **UHRIG, JOHN T; UHRIG, LENNIE L**

Diversion:

Water Rights: **37-177J**

This map depicts the Place of Use for these water rights.

Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 0.1 0.2 Miles

State of Idaho
Department of Water Resources

Owner: Matheney, Joe & Melissa
Water Right Number(s): 37-471 (4/30/1884; 2 cfs); 37-1125 (5/20/1908; 3.2 cfs)
Diversion Name: Appell 60
Field Visit Date: 07/02/2015
Diversion Location: Diversion from Little Wood River **a**bout 3.3 miles southwest of Richfield. Diversion and POU above Milner Gooding Canal.

Combined/Other Water Rights & Sources: The two water rights when combined shall not exceed a total diversion rate of 5.20 cfs and irrigation of a combined total of 121 acres in a single season. Rights have no conditions regarding combined use with BWCC/AFRD2. BWCC and AFRD2 records show no shares for Matheney.

Diversion Description: Concrete diversion dam across river checks water to open ditch on north side of river. A concrete frame orifice-head gate control box is located about 180 ft downstream of ditch opening. Box has submerged orifice on upstream side for measurement and a Waterman screw gate and culvert on downstream side of box for gate control.

Measuring Device: Submerged orifice – 1.5 foot square opening. Measurement = 3.67 cfs on field visit date (as measured by assistant watermaster, but charging 2 cfs at pump downstream due to spill back to river). Pump and pivot running at time of visit, watering grain stubble. Observed spill past pump station back to river. A flow meter could be installed for actual pump measurement.

Conveyance & Irrigation System: From orifice-gate control box, open ditch for 0.3 mi to pump station consisting of centrifugal pump operated by diesel motor engine (HP rating not found). Pump pressurizes water to 6.5 tower center pivot with end gun. Grain crop appeared to be recently harvested. Total irrigated area from digitizing 2015 NAIP imagery is approximately 113.5 acres under pivot north of river.

Additional Comments: Water right includes 121.0 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 121.0 acres.

Water right POU includes field south of river but field did not appear to be irrigated per 2015 imagery. Water right POU is irregular polygon shape fields overlapping pivot area. Water right place of use should be updated. Place of use transfer recommended. Most of the pivot POU is within BWCC POU boundary but not in AFRD2 POU boundary. This is one of two areas where BWCC and AFRD2 water right POU boundaries do not match.

1. Appell 60: diversion dam across river, to open ditch and orifice-control box about 180 ft downstream.

2. Appell 60: orifice-head gate control box.

3. Appell 60: ditch with pump intake and pump station (left), pivot edge behind pump station.

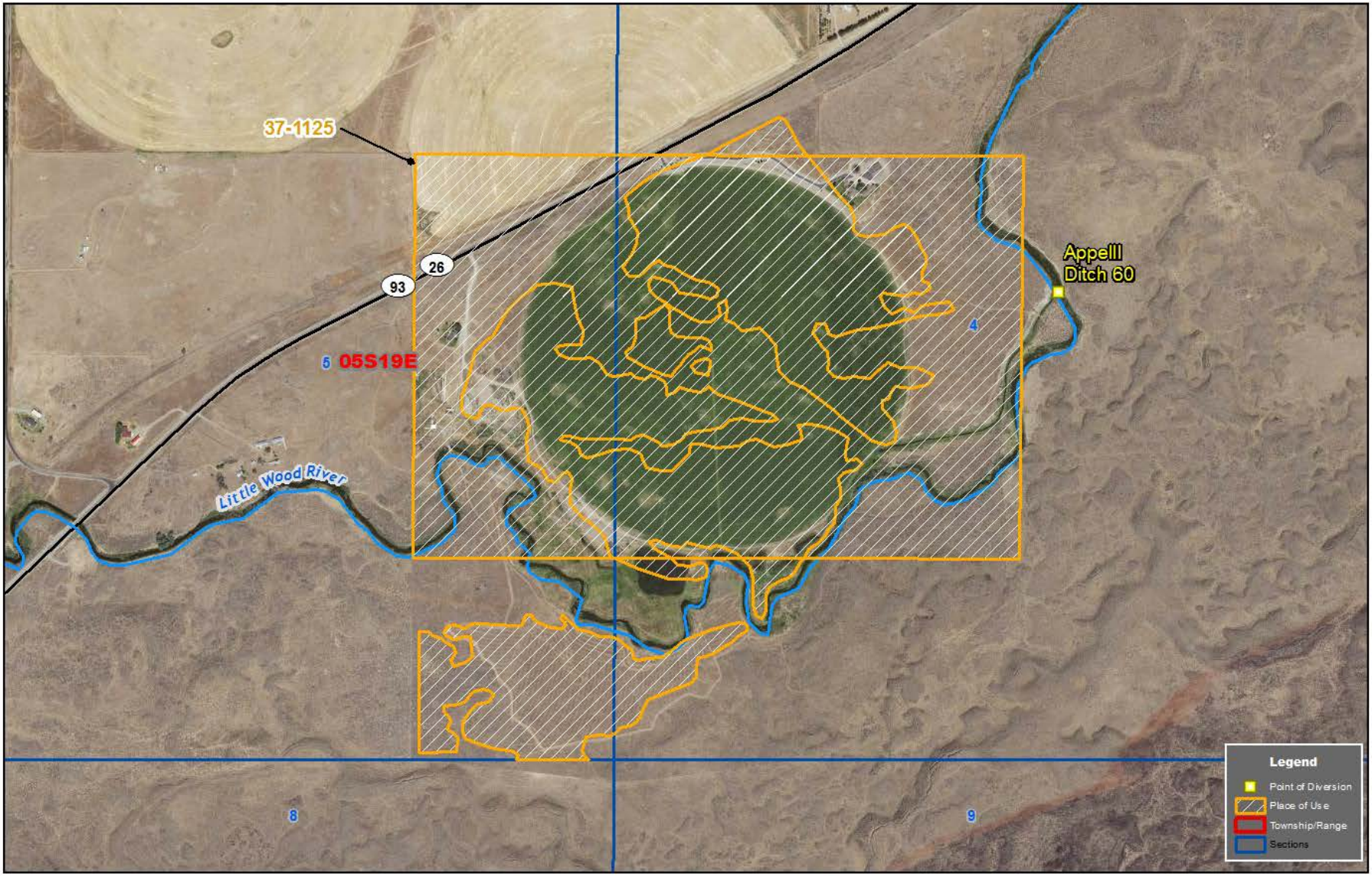
4. Appell 60: ditch return flow/spill back to river, pump in background.

Owner: **MATHENEY, JOE; MATHENEY, MELISSA**

Diversion: **AppelII Ditch 60**

Water Rights: **37-471, 37-1125**

This map depicts the Place of Use for these water rights.



Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 0.175 0.35 Miles

State of Idaho
Department of Water Resources

Owner: Glanbia Foods Inc
Water Right Number(s): 37-177M (4/1/1883; 0.14 cfs); 37-374A (5/15/1884; 0.56 cfs); 37-2043C (5/10/1906; 0.88 cfs)
Diversion Name: B1 L5
Field Visit Date: Not visited
Diversion Location: Diversion from the B1 L5 is about 4.25 miles east of Gooding. The head of the B1 is from the South Gooding Main Canal right after it is diverted from the Little Wood River. Diversion and POU are located below Milner Gooding Canal.

Combined/Other Water Rights & Sources: All three rights include water right condition S05 – Combined with water from the Big Wood Canal Co.; two of the three rights have condition 161 – AFRD2 exchange provisions. Water rights 37-177M and 37-374A have a combined use limit of 39 acres and 156 AF. Water right 37-2043C is limited to 25 acres of irrigation. Total combined acres under three rights limited to 64 acres within a 983.7 acre permissible place of use. Total rate of diversion for all three rights is 1.58 cfs.

IDWR staff confirmed that Glanbia owns or has access to over 900 shares of BWCC-AFRD2 water per BWCC-AFRD2 records (Glanbia is listed as operator of certain certificates of shares owned by Avonmore West, Inc.) There are also ground water rights associated with the processing facility and wastewater that contribute to on-site ponds used for irrigation. Northside CC place of use boundary overlaps Glanbia water rights' place of use.

Diversion Description: Head gate is located off the B1 Lateral where it is piped into Glanbia's ponds at the Gooding processing plant.

Measuring Device: Submerged orifice.

Conveyance & Irrigation System: Water is piped underground to the wastewater pond from the processing plant. From the pond the water is pressurized into pivots. Total irrigated area from digitizing 2015 NAIP imagery is approximately 909 acres. Water rights are limited to 64 acres.

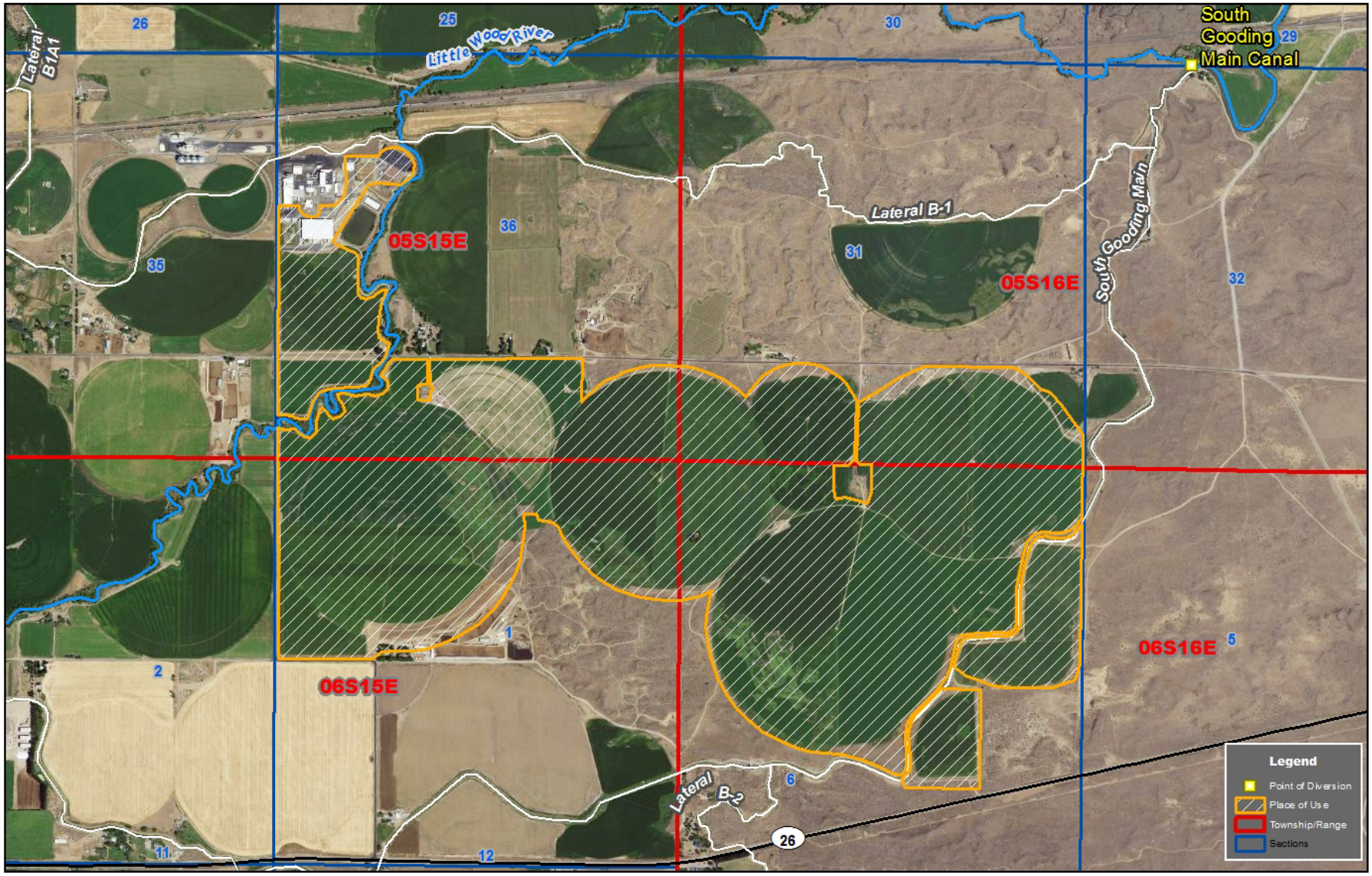
Additional Comments: During the 2015 irrigation season the pipe between the Lateral diversion and pond was not functioning so no diversions occurred. The pipe should be fixed prior to the 2016 irrigation season. The majority of water used for irrigation comes from wastewater from the plant.

Owner: **GLANBIA FOODS INC**

Diversion: **South Gooding Main Canal**

Water Rights: **37-177M, 37-2043C, 37-374A**

This map depicts the Place of Use for these water rights.



Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 0.375 0.75 Miles

State of Idaho
Department of Water Resources

Owner: T5 Ranch
Water Right Number(s): 37-21838 (6/15/1888; 1.56 cfs)
Diversion Name: Brown 62
Field Visit Date: 07/02/2015
Diversion Location: Diversion from Little Wood River about 5.5 miles southwest of Richfield. Diversion and POU above Milner Gooding Canal.

Combined/Other Water Rights & Sources: Right 37-21836 owned by T5 Ranch shares the same POU and POD as 37-21838, but 37-21836 was not included in the BWLWWUA delivery call. Right 37-21836 is one of the 'Cottonwood Decree' rights from Big Wood River with 5/27/1899 priority, which is diverted to Richfield Canal, injected to Jim Byrns Slough, injected to Little Wood and re-diverted at this location. Rights 37-21838 and 21836 are limited to irrigation of combined total of 99.8 acres. Both rights include condition S05 – combined with water from BWCC. IDWR staff did not find any BWCC-AFRD2 shares listed in BWCC-AFRD2 records, although water right POU is within BWCC-AFRD2 boundaries.
Note: This is also POD for two BLM rights, 37-21837 and 37-21839. These two rights were split from same set of parent rights for T5 rights and have same priorities as T5 rights (rates are 0.64 and 0.44 cfs respectively). The BLM POU is between ditch heading and T5 POU.

Diversion Description: Concrete and stop log diversion dam across river checks water to open ditch on south side of river with orifice-control box. Control box is concrete check box type structure with adjustable wood gate leaf on upstream side having orifice opening. A steel slide gate with screw/hand wheel is on downstream side of box for control.

Measuring Device: Submerged orifice – 1.75 foot square opening. Assistant watermaster measured flow through orifice at time of visit (2.0 cfs). Orifice installation is acceptable for measurement.

Conveyance & Irrigation System: Open ditch for about 1 mi to bubbler and then gated pipe for flood irrigation of hay field. Irrigated area under T5 rights is about 57 acres per 2015 imagery. Portions of water right POU did not appear irrigated.

Additional Comments: Water right includes 99.8 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 99.8 acres. The POU has had minor changes to the areas irrigated. Approximately 3.5 irrigated acres were found to be outside current water right boundaries. A transfer may need to be filed. Data based on 2013/2015 NAIP imagery and Landsat imagery for June/July 2015.

Right includes year round stock water use.

1. Brown 62: diversion dam across river, to open ditch and orifice-control box (on left).

2. Brown 62: orifice-head gate control box, open ditch downstream of box to bubbler and gated pipe.

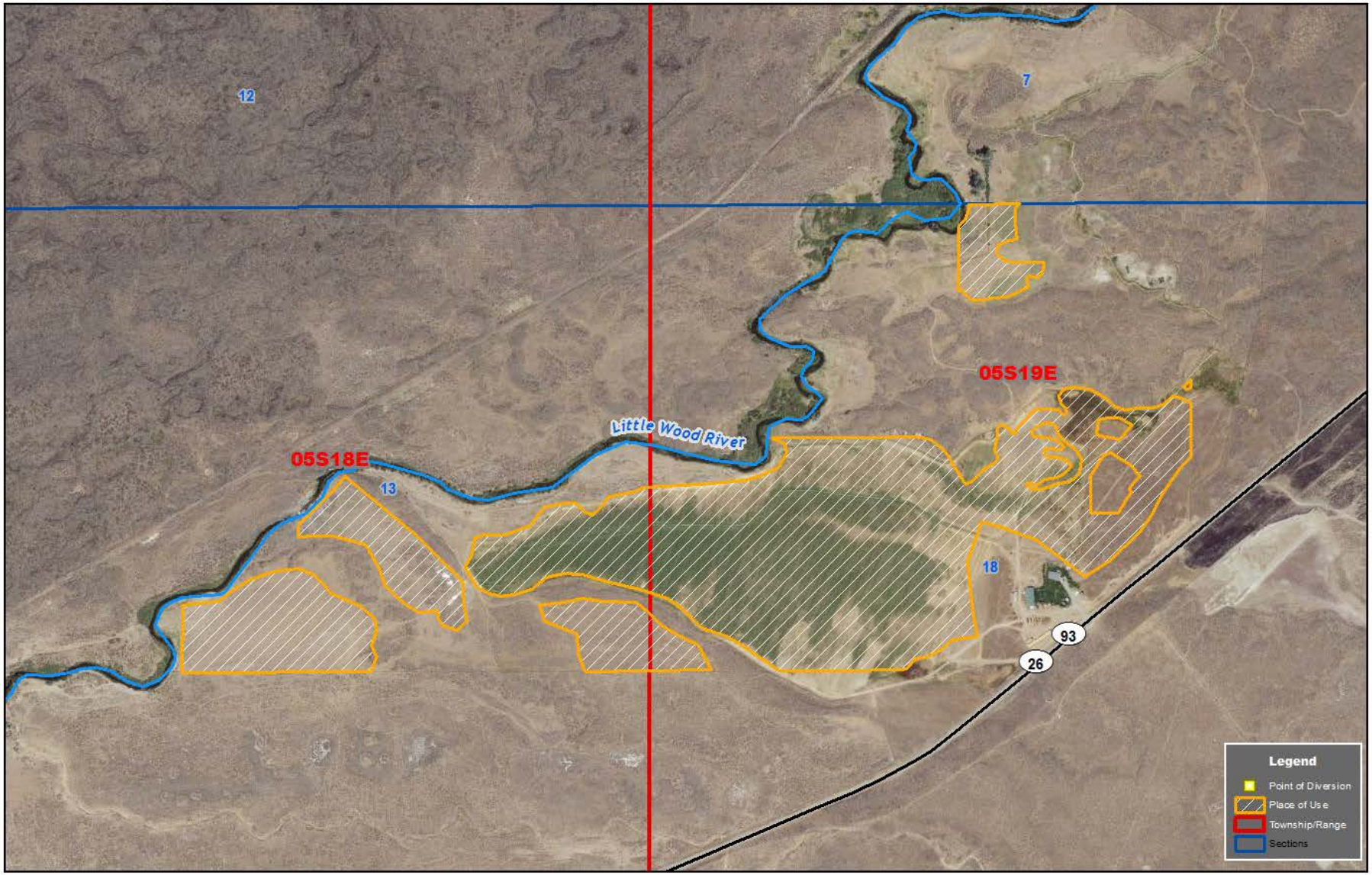
3. Brown 62: Submerged orifice and slide gate control box.

Owner: **T5 RANCH LLC**

Water Rights: **37-21836 , 37-21838**

Diversion: **Richfield Canal, Jim Byrns Slough, Injection of Jim Byrns Slough into Little Wood River, Brown Ditch 62**

This map depicts the Place of Use for these water rights.



Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 850 1,700 Feet

State of Idaho
Department of Water Resources

Owner: Big Wood Canal Company
Water Right Number(s): 37-13111 (12/24/1906, 75); 37-21401 (5/15/1885, 5.3); 37-21402 (4/6/1883, 3.55); 37-21403 (4/1/1887, 5.2); 37-21404 (7/1/1896, 15.3); 37-21405 (4/1/1884, 2.61)
Diversion Name: Carpenter Ditch 98
Field Visit Date: 08/18/2015
Diversion Location: Diversion for the Carpenter ditch is about 2 miles west of Gooding. The Carpenter ditch is diverted from the Little Wood River. Diversion and POU are located below Milner Gooding Canal.

Combined/Other Water Rights & Sources: Carpenter 98 Ditch is a diversion or re-diversion for BWCC-AFRD2 rights and water supplies. Only one private water right was found that lists this same location as a point of diversion; the right is a 1960 priority right that was not in the BWLWWUA delivery call. The Water District 37 watermaster reported that the Big Wood Canal Company Little Wood River irrigation rights are only delivered to this canal during periods of high flow. The winter stockwater right (37-13111) may be delivered at the Carpenter during the winter season of use.

Diversion Description: Concrete box with 57" metal screw top head gate.

Measuring Device: No measuring device installed. There is an unused location below the diversion for a submerged orifice.

Conveyance & Irrigation System: Open ditch to ditch laterals and re-diversion head gates.

Additional Comments:

1. The Little Wood River flows over the check boards on the left, the Carpenter ditch diversion is on the right.

2. The upstream view, Little Wood River flows over the check boards on the right, the Carpenter ditch diversion is on the left.

3. Looking down the Carpenter ditch, this was likely a location for a submerged orifice. On the left side in the grass are some stilling wells for measuring the water level above and below the orifice.

Owner: City of Shoshone
Water Right Number(s): 37-560A (11/28/1882; 0.4 cfs); 37-606C (11/28/1882; 1.0 cfs); 37-691G (4/1/1885; 1.14 cfs)
Diversion Name: City Pump 69-P2
Field Visit Date: 07/02/2015
Diversion Location: Diverts from south side of river on northeast edge of city, about 0.8 miles northeast of intersection of Highways 26 and 75. Diversion and POU located below Milner Gooding Canal.

Combined/Other Water Rights & Sources: All three City rights referenced above have a condition that limits the rights to a combined total of 41 acres in a single irrigation season. All three rights also include condition S05 – use of rights is combined with water from BWCC. BWLWWUA information response indicates that City holds total of 345 shares in BWCC-AFRD2. IDWR staff review of BWCC-AFRD2 records (spreadsheet files) shows that City has 100.21 shares under same certificate numbers referenced by BWLWWUA.

Diversion Description: Concrete diversion box in river with intake pipe to steel vault with a 15 HP motor and pump. An eight inch steel mainline off pump transitions to 12 inch PVC pipe that connects to a CMP standpipe that houses an inoperable flow meter. Pipeline is buried below CMP.

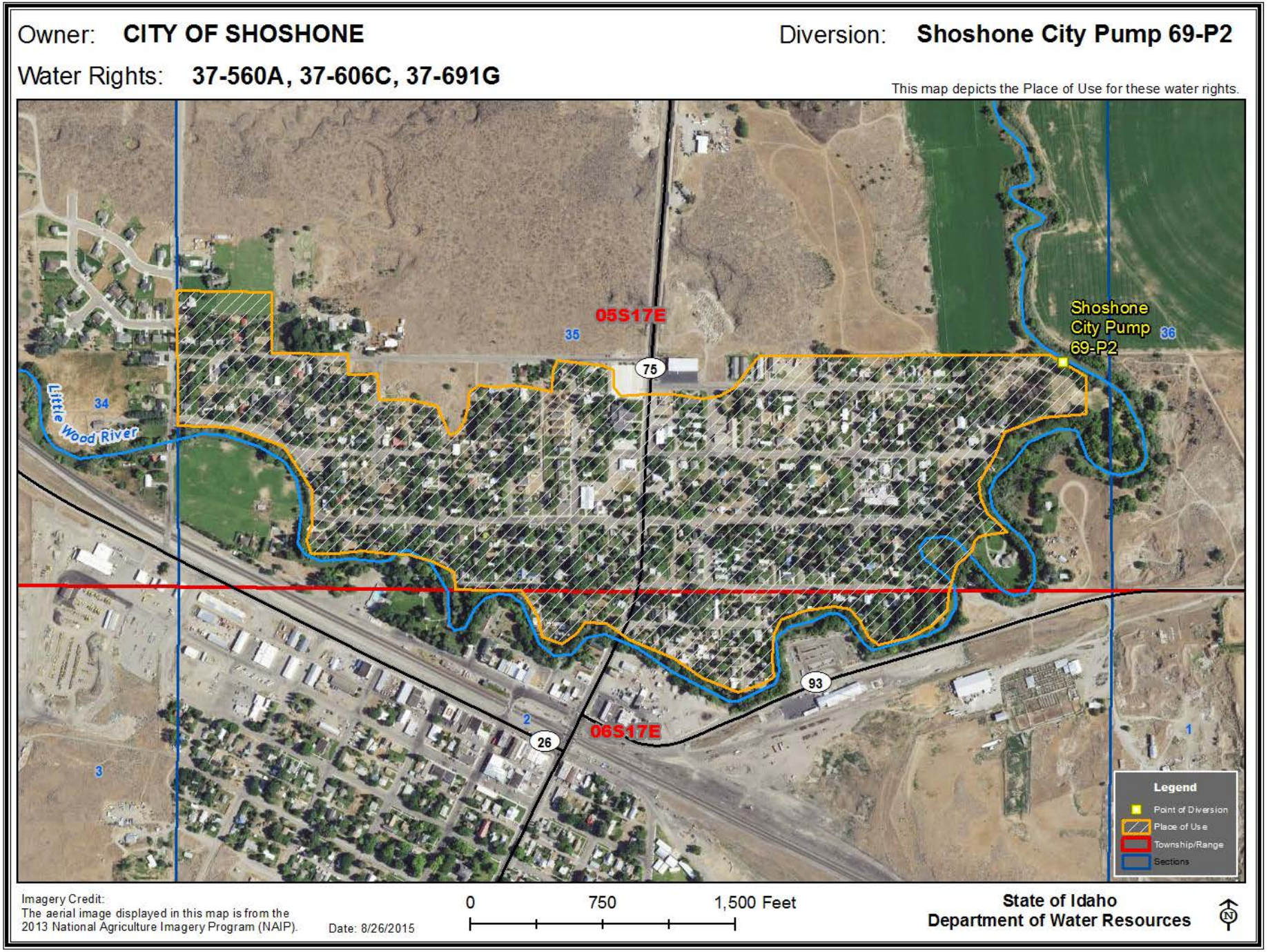
Measuring Device: An old mechanical flow meter is installed on pipe in CMP below pump. Meter manufacturer/model was not visible or apparent. Meter is not operable and has not been operable for many years. Meter appeared to be an old Water Specialties type meter (analog with totalizer). Assistant watermaster said flow should be 3.12 cfs, which is the rate he or water district records for the diversion. The rate may be based on a pump capacity or rating.

Conveyance & Irrigation System: Pressurized mainline from pump distributes water to city irrigation system.

Additional Comments: Water District 37 water delivery records from 2003 through 2014 show a constant daily diversion rate of 3.12 cfs. The total cumulative rate of flow under the water rights is 2.54 cfs. Note: BWLWWUA submitted water delivery records for other City of Shoshone diversions that are not authorized or described by these water rights.

1. Shoshone City Pump 69-P2 diversion box in river (south side of river) to intake and steel vault/well

2. Shoshone City Pump 69-P2, steel vault/well with 15 HP pump to 8 steel mainline that transitions to 12 inch PVC pipe. CMP in foreground is exposed section of pipe with inoperable flow meter.


Owner: CITY OF SHOSHONE
Diversion: Shoshone City Pump 69-P2
Water Rights: 37-560A, 37-606C, 37-691G
This map depicts the Place of Use for these water rights.
05S17E
06S17E
Shoshone City Pump 69-P2
Little Wood River
35
36
34
2
3
1
75
93
26
Legend
Point of Diversion
Place of Use
Township/Range
Sections
Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).
Date: 8/26/2015
0
750
1,500 Feet
State of Idaho
Department of Water Resources

Owner: Arkoosh, William
Water Right Number(s): 37-176 (4/1/1890; 2.0 cfs), 37-1131 (8/1/1906; 2.4 cfs)
Diversion Name: Devaney 86P1 and Devaney 86P2
Field Visit Date: 06/26/2015
Diversion Location: Approximately two miles north of State Highway 26 and 4.25 miles east of Gooding just north of the Union Pacific Railroad and Glanbia Foods Inc. POD and POU located below Milner Gooding Canal.

Combined/Other Water Rights & Sources: Both rights include AFRD2 combined use condition (S03) and AFRD2 exchange condition (161). IDWR staff review verified about 195 shares of BWCC-AFRD2 water as per BWCC-AFRD2 records, confirming information submitted by BWLWWUA. Ground water right 37-7570 is appurtenant to about 90 percent of these two Little Wood River rights. POU also overlapped by Northside CC place of use boundary.

Diversion Description: Water is diverted directly from the Little Wood River through a short channel into a pond by two different pumps, one 50 HP short coupled turbine (west diversion) and a 30 HP short coupled turbine (east diversion).

Measuring Device: Both pumps have installed 8 inch McCrometer propeller flow meters. The west diversion installation is marginal with pump and chemigation valve approximately five diameters of pipe upstream of the flow meter, and 12 inches downstream before mainline split and elbows. The east diversion appears to have adequate straight runs of pipe to accommodate a mechanical flow meter to operate within manufacturer's recommended tolerances. West pump meter flow reading was about 500 gpm, and East pump meter reading was about 700 gpm at time of visit.

Conveyance & Irrigation System: The irrigation system for this place of use consists of the two wet well pumps setup directly off the river to pressurize multiple short window wiper pivots along with some wheel and lines in areas not covered by the pivots. Observed corn crop in pivot near pumps.

Additional Comments: Water right includes 153.5 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 153.5 acres but actual area irrigated deviates somewhat from water right POU. Approximately 22.0 irrigated acres were found to be outside current water right boundaries. A transfer may need to be filed. Review of irrigated area based on 2013/2015 NAIP imagery and Landsat imagery for June/July 2015.

The water rights both describe two points of diversion with the east diversion in the SESW of 05S 16E section 25. Both points of diversion are located in the NENW of Section 36, 05S 15E. The east POD location should be changed or updated through a water right transfer.

The Water District 37 records and annual Black Book reports include diversion data for B1 Devaney 86-86P (including a deep well credit in 2014). IDWR staff assumes these data relate to separate pumps on the B1 Lateral off the South Gooding Main Canal which should rely on BWCC-AFRD2 shares or water. The B1 Lateral is located just south of the Devaney 86 pumps on the Little Wood River.

1. Devaney 86 East pump

2. East pump pipeline with installed flow meter

3. Devaney 86 West pump.

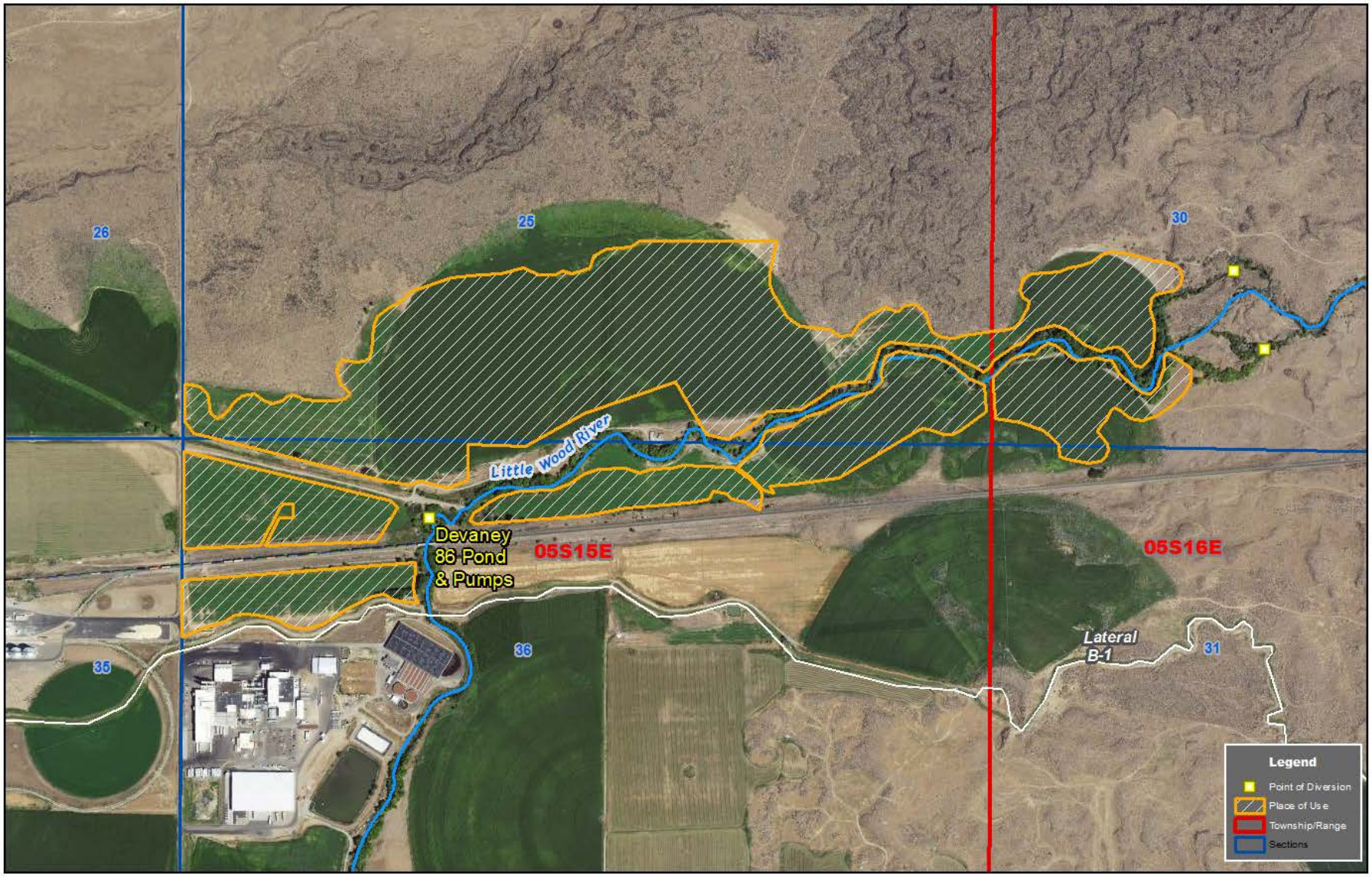
4. Devaney 86 West pump and mainlines from pump. Note diversion pond in background and pipeline from east pump crossing edge of pond in left-center part of photo.

Owner: **ARKOOSH, WILLIAM**

Diversion: **Pond and Pumps**

Water Rights: **37-1131 , 37-176**

This map depicts the Place of Use for these water rights.



Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 0.175 0.35 Miles

State of Idaho
Department of Water Resources

Owner: Big Wood Canal Company
Water Right Number(s): 37-13111 (12/24/1906; 75.0 cfs); 37-21401 (5/15/1885; 5.3 cfs); 37-21402 (4/6/1883; 3.55 cfs); 37-21403 (4/1/1887; 5.2 cfs); 37-21404 (7/1/1896; 15.3 cfs); 37-21405 (4/1/1884; 2.61 cfs)
Diversion Name: Dietrich Main Canal 11
Field Visit Date: 05/26/2015
Diversion Location: Diversion is located approximately 0.75 miles SE of Richfield at the head of the Dietrich Main Canal. The diversion is situated at the confluence of the Little Wood River and the Jim Byrns Slough.

Combined/Other Water Rights & Sources: This is the large and main BWCC canal for delivery of BWCC water rights and Magic Reservoir storage water to the Dietrich Tract.

Diversion Description: A concrete diversion dam and control structure is located on the Little Wood River at the confluence of the river and the Jim Byrns Slough. The Dietrich Main Canal head gate structure is about 120 feet east of the river diversion dam and control structure. Both diversion and control structures are used to divert and control water down the Dietrich Main Canal. The river diversion dam is a concrete structure across the river with two steel slide gates (about 4 ft wide) on the east side of the channel that provides control of river flow downstream. On the west end of the structure, a Waterman type canal gate (steel slide gate over culvert opening) controls flow to the BLM Ditch, a small open ditch for several small rate of flow irrigation rights. The structure has a 20 to 30 ft opening in the middle for overflow down the river. Water District 37 and BWCC-AFRD2 use this opening as a weir measuring device to reference flows against upstream gage stations and flow in Dietrich Canal.

The Dietrich Main Canal has a single steel slide control gate in the middle of the concrete control structure with automated lift control, plus one automated steel slide gate on the east end of the structure, and one manual steel slide gate with hand wheel n the west end of the structure (end gates are about 4 ft wide).

Measuring Device: Rated section in canal about 255 yards downstream of canal head gate structure. Section includes a stilling well with continuous recorder equipment (Campbell Scientific pressure transducer for water level monitoring). BWCC-AFRD2 maintains rated section and reports data to watermaster.

Conveyance & Irrigation System: Open ditch system to various re-diversions (head gates and laterals) within the Dietrich Tract. The main canal extends from Richfield to approximately 2.5 miles NW of the town of Dietrich.

Additional Comments:

1. Diversion dam across Little Wood River about 120 ft west of Dietrich Main Canal. Two head gates are on east end (left of photo) for river control; one gate on west end for BLM ditch.

2. Diversion/Control structure across Little Wood River just west of the Dietrich Main Canal (view of structure from west river bank by BLM Ditch. Stilling well shed in background.

3. View of river diversion dam/control structure (left) and mouth of Jim Byrns Slough (center).

4. Dietrich Main Canal diversion and control structure with head gate controls (view is from confluence point of river and Jim Byrns Slough, river dam and control structure is off photo to right).

5. View of Little Wood River (center of photo in background, and on left side of photo) from the Dietrich Main Canal control structure.

Owner: City of Gooding
Water Right Number(s): 37-262A (2/22/1883; 3.16 cfs), 37-271A (6/30/1882; 0.32 cfs), 37-282 (4/1/1877; 1.0 cfs), 37-662 (6/15/1885; 1.42 cfs), 37-709A (2/22/1883; 0.74 cfs), 37-960A (4/1/1883; 0.57)
Diversion Name: Gooding Recharge Diversion (formerly 95-P1 & Slough 93)
Field Visit Date: 06/26/2015
Diversion Location: The location of the Gooding Recharge Diversion is approximately two miles north of State Highway 26 and 4.25 miles east of Gooding just north of the Union Pacific Railroad and Glanbia Foods Inc. Other PODs in the same area include the Devaney 86 pumps.

Combined/Other Water Rights & Sources: Beneficial use of water under these rights is for ground water recharge in the area approximately 1.0 mile NE of the City of Gooding**.** All of the water rights have the AFRD exchange condition. BWLWWUA information response indicated that there are no BWCC-AFRD shares associated with the rights. This is correct if research of shares is based on matching legal descriptions between shares and water rights' POU. IDWR staff identified nearly 200 BWCC-AFRD2 shares held by City of Gooding based on review of BWCC-AFRD2 spreadsheet records.

Diversion Description: A diversion dam/check structure in the river raises or diverts water to concrete control structure and three automated steel slide or head gates at the head of an earthen ditch/channel to the recharge site. IDWR staff observed at the time of the field visit one gate in operation with the measuring device attached to the back of the concrete structure and gate bay or opening.

Measuring Device: Below automated #1 gate structure is one 3 ft rectangular weir used to deliver water to the recharge site downstream. At the time of the visit IDWR staff observed a 0.60' gauge reading over the rectangular weir with equivalent flow = 4.45 cfs. The additional gates would need to have measuring devices installed similar to the #1 gate structure if operated in the future.

Conveyance & Irrigation System: Check structure in the river allows for water to be diverted through three automated slide gates and a combination of both open and closed conduit delivery system approximately 3-4 miles in length where seepage or recharge occurs primarily on BLM ground NE of Gooding.

Additional Comments: Water is for recharge purpose only to mitigate for ground water permit 37-22850 approved in 2014. As per watermaster, 2015 is the first year for diversion of water to the recharge site using these Little Wood River rights.

1. Diversion dam/check structure in river controls water to City head gate structure and ditch channel.

2. Head gate control structure with 3 steel automated slide gates for control.

3. 3 ft rectangular contracted weir on south head gate bay.

Owner: 7 Mile Ranch
Water Right Number(s): 37-321 (4/30/1884; 3.0 cfs)
Diversion Name: Hughes 63P – 64P
Field Visit Date: 07/02/2015
Diversion Location: Diversion from Little Wood River about 8.5 miles southwest of Richfield. Diversion and POU located above Milner Gooding Canal.

Combined/Other Water Rights & Sources: Right 37-59A owned by 7 Mile Ranch shares the same POU and POD as 37-321, but 37-59A was not included in the BWLWWUA delivery call. Right 37-59A is one of the 'Cottonwood Decree' rights from Big Wood River with 5/27/1899 priority, which is diverted to Richfield Canal, injected to Jim Byrns Slough, injected to Little Wood and re-diverted at this location. Rights 37-321 and 59A are limited to irrigation of combined total of 173 acres. Right 37-321 includes no condition about being combined with water from BWCC and/or AFRD2. IDWR staff did not find any BWCC-AFRD2 shares listed in BWCC-AFRD2 records for 7 Mile Ranch, although water right POU is within BWCC-AFRD2 boundaries. BWLWWUA did not identify any BWCC-AFRD2 shares with this right or POU.

Diversion Description: Single screened box and intake pipe from river connects to 3 to 4 ft CMP stand pipe or well from which 2 centrifugal pumps divert water to mainlines and pressurized sprinkler systems. The north pump and mainline system has a 20 HP centrifugal pump connected to 8 inch mainline that appeared to connect to wheel and hand lines on other side of river (grain in at least one wheel line field). The south pump/mainline system has a 10 HP centrifugal pump and 8 inch mainline and appeared to connect to a 7 tower center pivot and corner hand lines (all grain crop).

Measuring Device: North pump has a McCrometer closed conduit propeller meter on 8 inch mainline. There is about 5 feet of straight pipe upstream of meter to elbow and 18 inches downstream of meter to butterfly valve. South pump also has 8 inch McCrometer meter with about 5 ft of straight pipe upstream of meter and 20 inches of straight pipe downstream. North pump reading 300 gpm; south pump reading 450 gpm at time of field visit. Meters do not have adequate straight run of pipe upstream (10 pipe diameters required). McCrometer meters not on IDWR approved flow meter list but generally acceptable if installed prior to IDWR's adoption of new flow meter standards and/or issuance of measurement orders.

Conveyance & Irrigation System: Pressurized irrigation mainlines to pivots/wheel and hand lines.

Additional Comments: Water right includes 173.0 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 173.0 acres. The POU has had changes to the areas irrigated. Approximately 9.5 irrigated acres were found to be outside current water right boundaries. A transfer may need to be filed. Data based on 2013/2015 NAIP imagery and Landsat imagery for June/July 2015.

Right lists two additional PODs that are not used. Pumps located in SWNENE Sec 23, 5S 18E.

1. Hughes 63P -64P pumps, river in background.

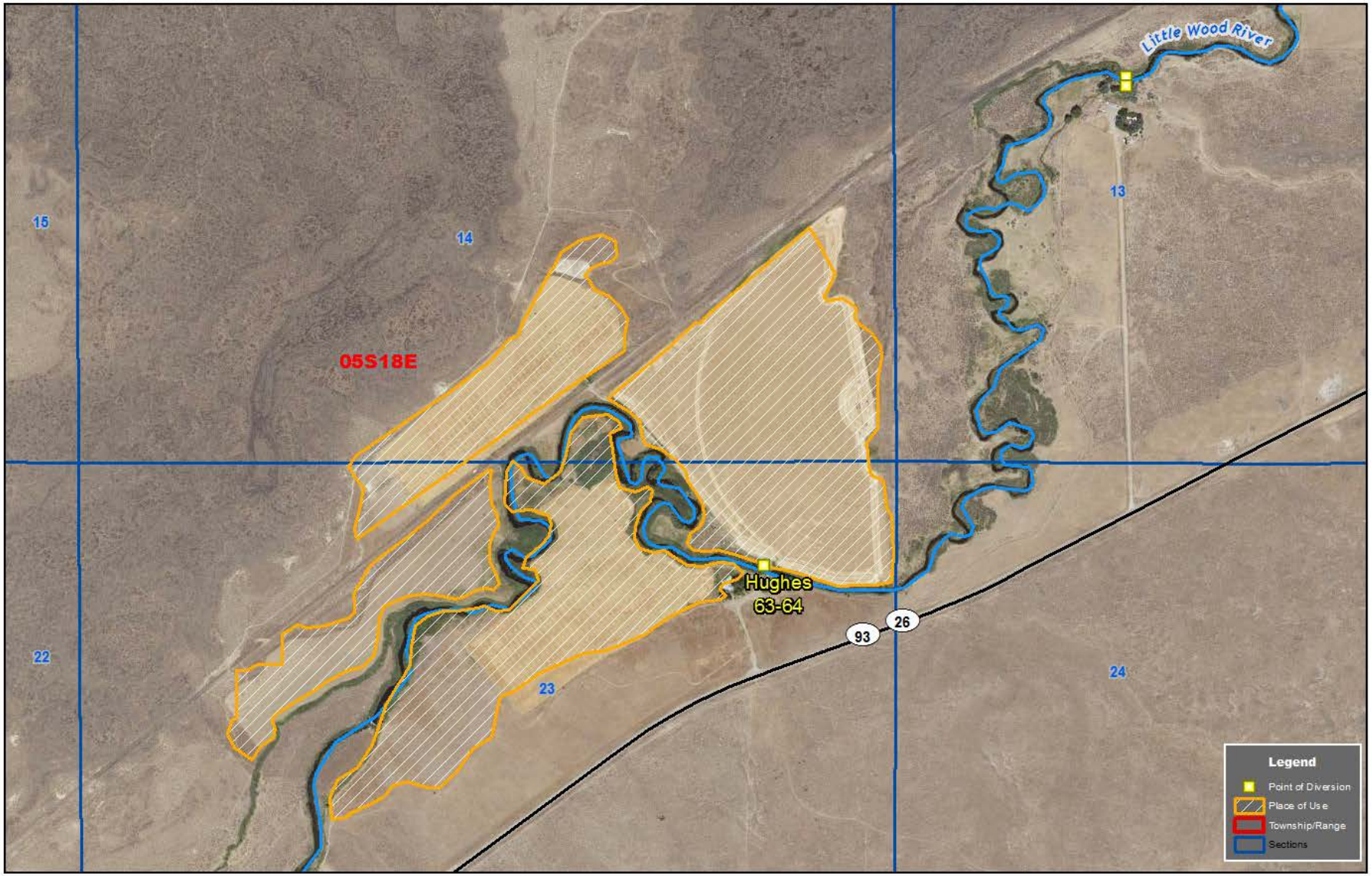
2. Hughes 63P - 64P pumps, CMP intake from river to two (2) centrifugal pumps. Pivot and grain crop in background.

Owner: **7 MILE RANCH LLC**

Diversion: **Hughes 63-64**

Water Rights: **37-321**

This map depicts the Place of Use for these water rights.



Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 0.175 0.35 Miles

State of Idaho
Department of Water Resources

Owner: Arkoosh, William
Water Right Number(s): 37-327 (5/15/1884; 2.2 cfs), 37-329 (5/15/1886; 2.0 cfs)**;** and 37-59M (re-diversion of Big Wood River 'Cottonwood Decree' right, 5/27/1899; 2.3 cfs)
Diversion Name: Hunter 78S-79N & 79P
Field Visit Date: 06/26/2015
Diversion Location: Diversions are approximately 2 miles north of Highway 26 and approximately 5.25 to 7.25 miles west of Shoshone on the north side of the Little Wood River. POD and POU located below Milner Gooding Canal.

Combined/Other Water Rights & Sources: Both Little Wood River rights include AFRD2 combined use condition (S03) and AFRD2 exchange condition (161). IDWR staff review verified 55.5 shares/acres of BWCC-AFRD2 water as per BWCC-AFRD2 records, partially confirming information submitted by BWLWWUA who identified additional shares under customer/cert #12, but those appear to go with lands under the Winters 80-P diversion and related rights.

Diversion Description: There are three diversions associated with these water rights.

a. The Hunter 78S Ditch is an open ditch diversion along the south side of the river in the NENE of Section 26, 5S, 16E. The ditch serves the POU south of the river. The assistant watermaster explained that this ditch was taken out this year due to construction work on a hydro plant. The ditch or diversion area was not visited.
b. The Hunter 79N Ditch is located about a half-mile downstream of Hunter 79S on the north side of the river. A rock dam in the river checks water to a small ditch opening with a concrete orifice-head gate control box at the head of the ditch. The box has a wooden gate across the front with a rectangular submerged orifice for measurement, and a steel frame slide gate with hand wheel or turn screw on the downstream side of the box for control.
c. The Hunter 79P pump is located on the north side of the river about 1.75 miles downstream of the Hunter 79N Ditch. A diesel generator powers a centrifugal pump (no name plate HP found) drawing water directly from the river. The pump discharges water to an 8 inch mainline connected to a dragon filter which that tees at 90 degree elbow to steel 8 inch mainline that pressurizes a center pivot.

Measuring Devices: Hunter 78S: There was no measuring device in Hunter 78S this year due to non-use of ditch related to Hydro plant construction or maintenance. As noted above, a submerged orifice is used for the Hunter79N Ditch; the rectangular orifice opening or size is 3 ft square. The Hunter 79P pump is measured using a McCrometer propeller flow meter on the 8 inch steel line below the dragon filter. The meter installation is marginal as meter is just about 42 inches below elbow from filter. Pipe length downstream of meter is good. Meter and pump was not running at time of visit.

Water District 37 combines measurements of all three diversions into one annual summary report. The district sometimes tracks and reports delivery of the river rights (and presumably any BWCC-AFRD2 water) separately from any Snake River storage water that is rented specifically for the place of use associated with these water rights. Snake River rental water has been acquired and re-diverted here via the Milner Gooding Canal in recent years.

Conveyance & Irrigation System: When in use, the Hunter 78S is an open ditch to irrigation fields which are flood irrigated. The Hunter 79N Ditch is an open earthen ditch to several fields

that are flood irrigated. The 79P pump and mainline pressurized a center pivot with end gun and no corner systems.

Additional Comments: The place of use for the water rights is spread out along both sides of the river a distance of nearly three miles. Water right includes 245.0 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 245.0 acres as per review of 2013/2015 NAIP imagery and Landsat imagery for June/July 2015. The actual irrigated area deviates from the water right POU in several places. Approximately 10 to 12 irrigated acres were found to be outside current water right boundaries as well as the BWCC-AFRD2 boundaries. Additionally, the rights include a place of use description in the SWNW of Section 28 that does not appear to have been irrigated in recent years based on review of imagery from 2004 to 2015. The water rights also include a portion of the NENE of Section 26, but it is not clear how these acres are irrigated from any of the Hunter diversions since the field is north of the river and upstream of all the diversions. It is likely that the field is irrigated from an upstream diversion, the McFall 77N Ditch.

The location of the Hunter 79P pump is an authorized point of re-diversion for the Big Wood River right 37-59M, but is not an authorized POD for the two Little Wood River rights. A transfer is probably needed to correct this POD issue and address any POU updates or changes.

1. Hunter 79N diversion dam in river. Appears to be rock dam but view was obscured by higher level of water in river.

2. Hunter 79N Ditch: orifice-head gate control box at head of ditch off river. Wooden submerged orifice on box entrance.

3. Hunter 79N: head gate on orifice-head gate control box.

4. Hunter 79P: pump with diesel generator.

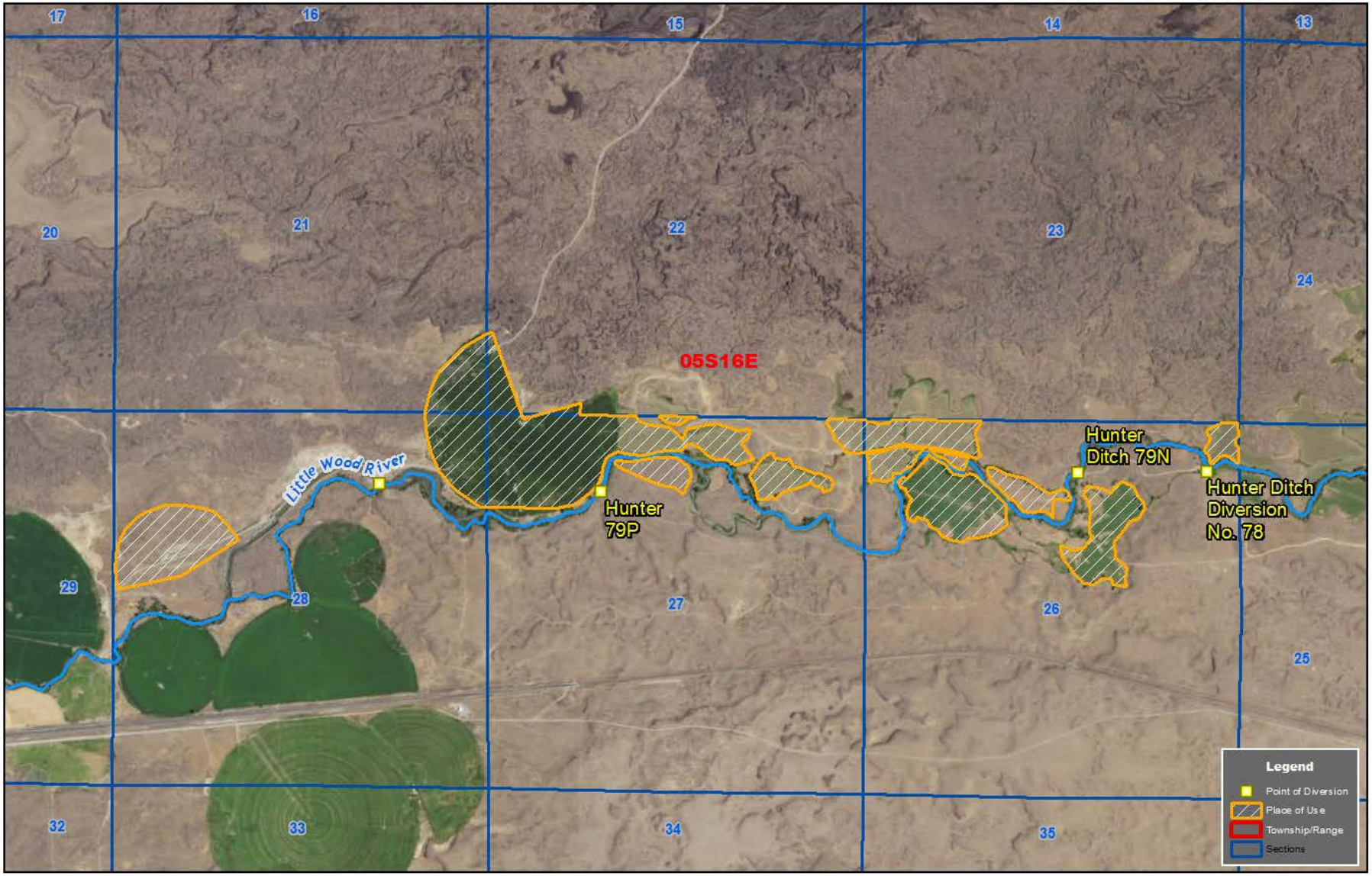
5. Hunter 79P pump: 8 inch mainline off dragon filter with McCrometer flow meter.

Owner: **ARKOOSH, WILLIAM**

Water Rights: **37-327, 37-329, 37-59M**

Diversion: **Hunter 79P, Hunter Ditch 79N**
Hunter Ditch Diversion No. 78

This map depicts the Place of Use for these water rights.



Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 2,150 4,300 Feet

State of Idaho
Department of Water Resources

Owner: Big Wood Canal Company
Water Right Number(s): 37-13111 (12/24/1906; 75.0 cfs); 37-21401 (5/15/1885; 5.3 cfs); 37-21402 (4/6/1883; 3.55 cfs); 37-21403 (4/1/1887; 5.2 cfs); 37-21404 (7/1/1896; 15.3 cfs); 37-21405 (4/1/1884; 2.61 cfs)
Diversion Name: Kissler 60-P
Field Visit Date: 07/29/2015
Diversion Location: About 4.2 miles southwest of Richfield just south of Highway 26. Above Milner Gooding Canal.

Combined/Other Water Rights & Sources: This diversion location is an authorized point of diversion for the BWCC Little Wood River rights. The BWCC Little Wood River rights or other BWCC-AFRD2 water rights and supplies may be diverted at this location. There are no other privately owned water rights diverted at this location.

Diversion Description: A radial concrete diversion dam across river is dam for old hydro power plant at this location. Dam diverts water to a 2 HP centrifugal pump in old power house. Pump pressurizes water to 4 inch aluminum mainline.

Measuring Device: None.

Conveyance & Irrigation System: The 4 inch mainline runs 1 hand line with 5 sprinkler nozzles for irrigation of very small pasture field. Leaks in mainline were observed.

Additional Comments: N/A

1. Kissler 60: Hydro dam across river to old power shed with 2 HP pump to 4 inch irrigation line.

2. Kissler 60: Aluminum mainline with leaks.

3. Kissler 60: Small irrigated pasture field.

4. Kissler 60: 2 HP pump in shed.

Owner: Kuntz, Calvin
Water Right Number(s): 37-193A (4/1/1883; 1.0 cfs)
Diversion Name: Kuntz 98-P2W
Field Visit Date: 06/26/2015
Diversion Location: 1.2 miles west of Gooding, 0.8 miles due northwest of 17X gage at confluence of Little Wood River and Northside Canal Company X Canal. POD and POU is below Milner Gooding Canal.

Combined/Other Water Rights & Sources: Right includes BWCC combined use condition (S05) and AFRD2 exchange condition (161). IDWR staff review confirmed 8.34 shares are appurtenant or associated with water right place of use. Northside Canal Company place of use boundary overlaps Kuntz water right place of use.

Diversion Description: Concrete diversion box in river with screened opening to intake pipe and 30 HP vertical turbine motor and pump connected to mainline and dragon filter, with 8 inch pipe line off dragon filter to irrigation system.

Measuring Device: A McCrometer meter is installed on 8 inch mainline off dragon filter. Meter installed just 3 ft below elbow beneath dragon filter. Upstream length or run of straight pipe is less than 10 pipe diameter requirement. Downstream distance is good. Flow meter reading was about 300 gpm at time of visit.

Conveyance & Irrigation System: The 8 inch line off dragon filter goes to a short center pivot (3 to 4 tower) with low pressure nozzles and end gun, plus hand lines in one corner. Pivot in grain at time of visit.

Additional Comments: Water right includes 38.0 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 38.0 acres.

1. Kuntz 98-P2W: diversion box in river to intake pipe and discharge pump (30 HP).

2. Kuntz 98 P2W: view of pump, dragon filter and flow meter on line off filter (foreground)

3. Kuntz 98 P2W: view of 30 HP motor/pump, mainline and dragon filter.

Owner: **KUNTZ, CALVIN D; KUNTZ, JOYCE DARLENE**

Diversion: **Kuntz 98-P2W**

Water Rights: **37-193A**

This map depicts the Place of Use for these water rights.

Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 0.05 0.1 Miles

State of Idaho
Department of Water Resources

Owner: Big Wood Canal Company
Water Right Number(s): 37-21401 (5/15/1885; 5.3 cfs); 37-21402 (4/6/1883; 3.55 cfs); 37-21403 (4/1/1887; 5.2 cfs); 37-21404 (7/1/1896; 15.3 cfs); 37-21405 (4/1/1884; 2.61 cfs)
Diversion Name: Lezamiz 59
Field Visit Date: 07/02/2015
Diversion Location: 2.7 miles southwest of Richfield along Highway 26 where BWCC Lateral 367 enters the Little Wood River.

Combined/Other Water Rights & Sources: This diversion location is an authorized point of diversion for the BWCC Little Wood River rights. The BWCC Little Wood rights or other BWCC-AFRD2 water rights and supplies may be diverted at this location. There are no other privately owned water rights diverted at this location. The owner, Robin Lezamiz or Lezamiz Farms, holds BWCC-AFRD2 shares matching the legal description for lands across the highway.

Diversion Description: No diversion installed in 2015. The assistant watermaster reported that BWCC patron (Robin Lezamiz) places a portable diesel pump and pump intake on the north bank of the river next to Highway 26 and just below a highway culvert for BWCC Lateral 367. A mainline from the portable pump is run through the culvert to the place of used north of the highway. Lezamiz has installed the pump in years where Magic Reservoir was shut off early in the season.

Measuring Device: The diversion was not installed in 2015 so no measuring device observed.

Conveyance & Irrigation System: A portable mainline from pump (when installed) to at least one wheel line which was observed in field between pivots across highway. It is possible the pump may have connected to one of the pivots.

Additional Comments: N/A

1. Location on river bank where portable pump may be installed.

2. View of river (background) and BWCC lateral entering river – pump is installed at confluence. Photo taken near highway culvert for BWCC lateral.

3. View of place of use across highway from above river bank and pump location.

Owner: Arkoosh, John W.
Water Right Number(s): 37-460 (6/3/1884; 4.0 cfs); 37-461 (7/17/1884; 1.4 cfs); and 37-10343 (re-diversion of Big Wood River 'Cottonwood Decree' right, 5/27/1899, 10.7 cfs)
Diversion Name: McFall Ditch 76S & McFall Ditch 77N
Field Visit Date: 06/26/2015
Diversion Location: Located about 5 miles west-northwest of Shoshone and about 2 miles north of Highway 26.

Combined/Other Water Rights & Sources: Both Little Wood River rights include BWCC combined use condition (S05) and AFRD2 exchange condition (161). IDWR staff review verified 75 shares/acres of BWCC-AFRD2 water as per BWCC-AFRD2 records, confirming information submitted by BWLWWUA (actual or new certificate number is13390; BWLWWUA identified old number 12765).

Diversion Description: McFall Ditch 76S: An old concrete check structure with slide gate installed on the south bank of the river diverts water to a short channel to a concrete orifice-head gate control box at the head of the ditch. The box has a wooden gate across the front with a rectangular submerged orifice for measurement, and a wood slide gate with hand wheel or turn screw on the downstream side of the box for control (gate set in wood frame).

McFall Ditch 77N: A concrete check structure/diversion dam across a natural side channel of the river diverts water into a side concrete box/check structure at the head of the ditch. Water can be checked or controlled to ditch by placement of stop logs in checks. An orifice – head gate control box is located down the ditch a short distance from check structures. The orifice-gate box has a wooden submerged orifice for measurement across the front opening, and a wooden slide gate with steel hand wheel or turn screw for gate control (gate is set in wood frame).

Measuring Device: The McFall 76S device is a rectangular submerged orifice with 1 ft square area opening; the McFall 77N is a rectangular submerged orifice with a 3 ft square area opening.

Conveyance & Irrigation System: Both systems are open ditches to field places of use and flood irrigation with borders and field furrows. A portion of the main McFall 77N Ditch below the orifice-gate box is a concrete lined trapezoidal ditch going to upper and lower field places of use from which siphon tubes discharge to field furrows with borders. Some gated pipe was also observed within the fields on the north side of the river. South fields not observed but 2015 imagery appears to show gated pipe and field furrows with borders, consistent with description provided by BWLWWUA.

Additional Comments: Water rights authorize combine total of 199.1 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 199.1 acres. The POU has had minor changes to the areas irrigated. Approximately 2.6 irrigated acres were found to be outside current water right boundaries based on 2013/2015 NAIP imagery and Landsat imagery for June/July 2015.

1. McFall Ditch 77N diversion and check dams on side channel of river to head of ditch.

2. McFall Ditch 77N: Check dam in background, orifice-gate box in foreground.

3. McFall Ditch 77N: View or orifice-gate box from check structures.

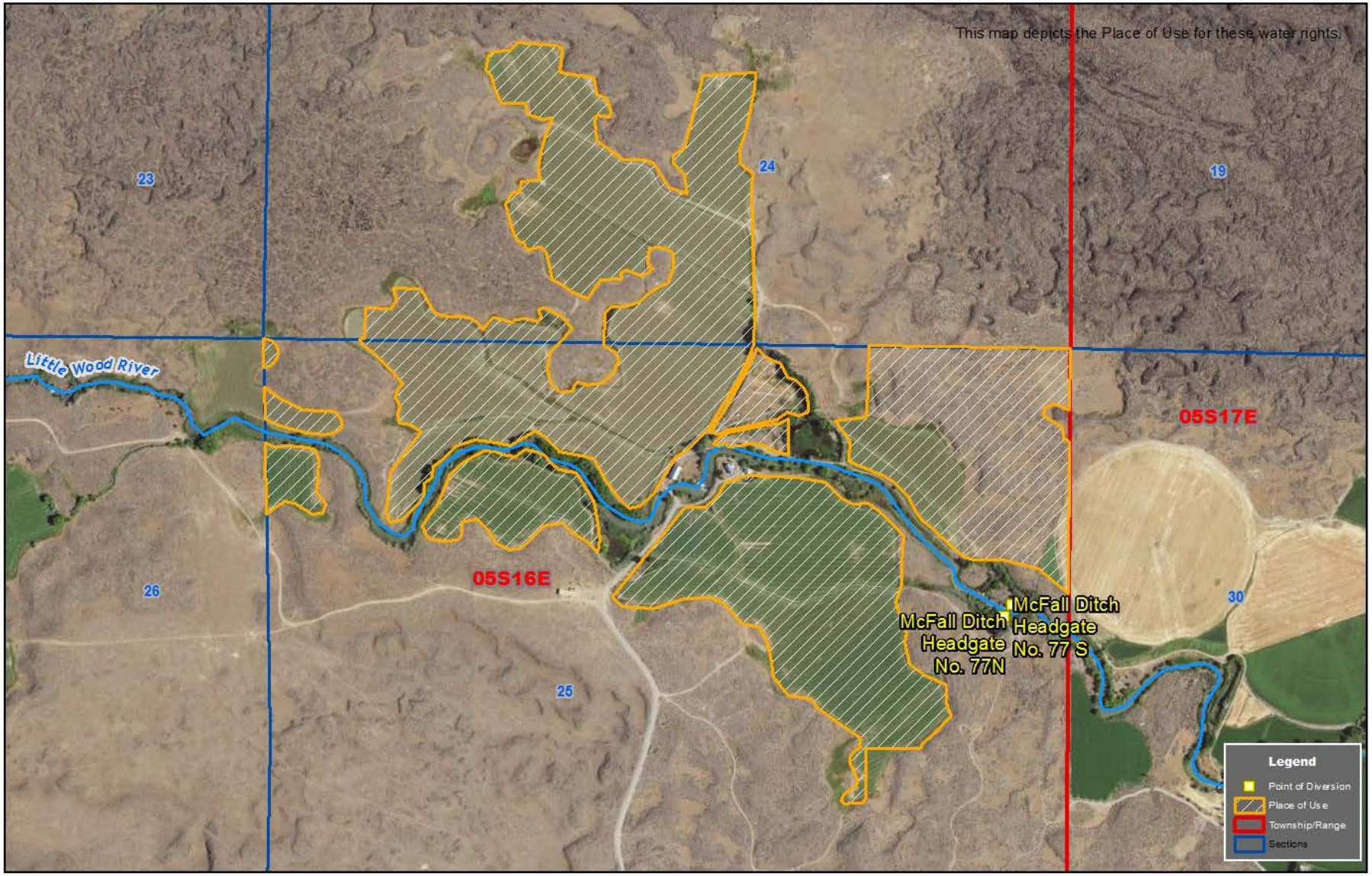
4. McFall Ditch 76S: Check structure gate in south bank of river (center of photo)

5. McFAll Ditch 76S: orifice-gate box. Ditch was off at visit on 6/26/15 but river level high and leaking around and through box.

Owner: **ARKOOSH, JOHN W**

Water Rights: **37-460, 37-461, 37-10343**

Diversion: **Richfield Canal, Jim Byrns Slough, Injection of Jim Byrns Slough into Little Wood River, McFall Ditch Headgates 77S and 77N**



Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 0.175 0.35 Miles

State of Idaho
Department of Water Resources

Owner: Hubsmith, Rodney Fred & Kaysi Sharon
Water Right Number(s): 37-472 (priority: 4/1/1884; rate = 1.2 cfs)
Diversion Name: McNulty 58
Field Visit Date: 07/02/2015
Diversion Location: Diversion from Little Wood River **a**bout 1.3 miles southwest of Richfield. Diversion and POU above Milner Gooding Canal.

Combined/Other Water Rights & Sources: Water right condition S05 – use of right combined with BWCC. No other water rights share this diversion. BWCC shares match water right POU as per BWCC Certificate #13371 (as per BWLWWUA information and IDWR review of BWCC records).

Diversion Description: Concrete and stop log diversion dam across river checks water to open ditch on north side of river. A wood frame orifice-head gate control box is located just downstream of ditch opening. Box has submerged orifice on upstream side for measurement and a wooden gate leaf on downstream side of box attached to steel stem rod and hand wheel for gate control.

Measuring Device: Submerged orifice – 1 foot square opening. Measurement was 1.20 cfs on field visit date. Measuring device is acceptable (may need sharp edge plate on rectangular opening if not already present).

Conveyance & Irrigation System: A buried pipeline (12 to 14 inches in diameter), located about 20 ft in open ditch below orifice-gate box, conveys water by gravity about 0.25 to 0.33 mi southwest to two short pivots (3 towers with end guns) and an additional field irrigated with wheel or hand lines (based on imagery, not observed) all north of the river. Staff observed alfalfa crop under the two pivots. A pasture field south of the river is irrigated from this system. Assistant watermaster believed the south field to be 3 to 5 acres but imagery indicates it may be about 10 to 12 acres. Total irrigated area from digitizing 2015 imagery is approximately 40 acres north of river, and 10 to 12 acres below river. Water right is limited to 48.9 acres.

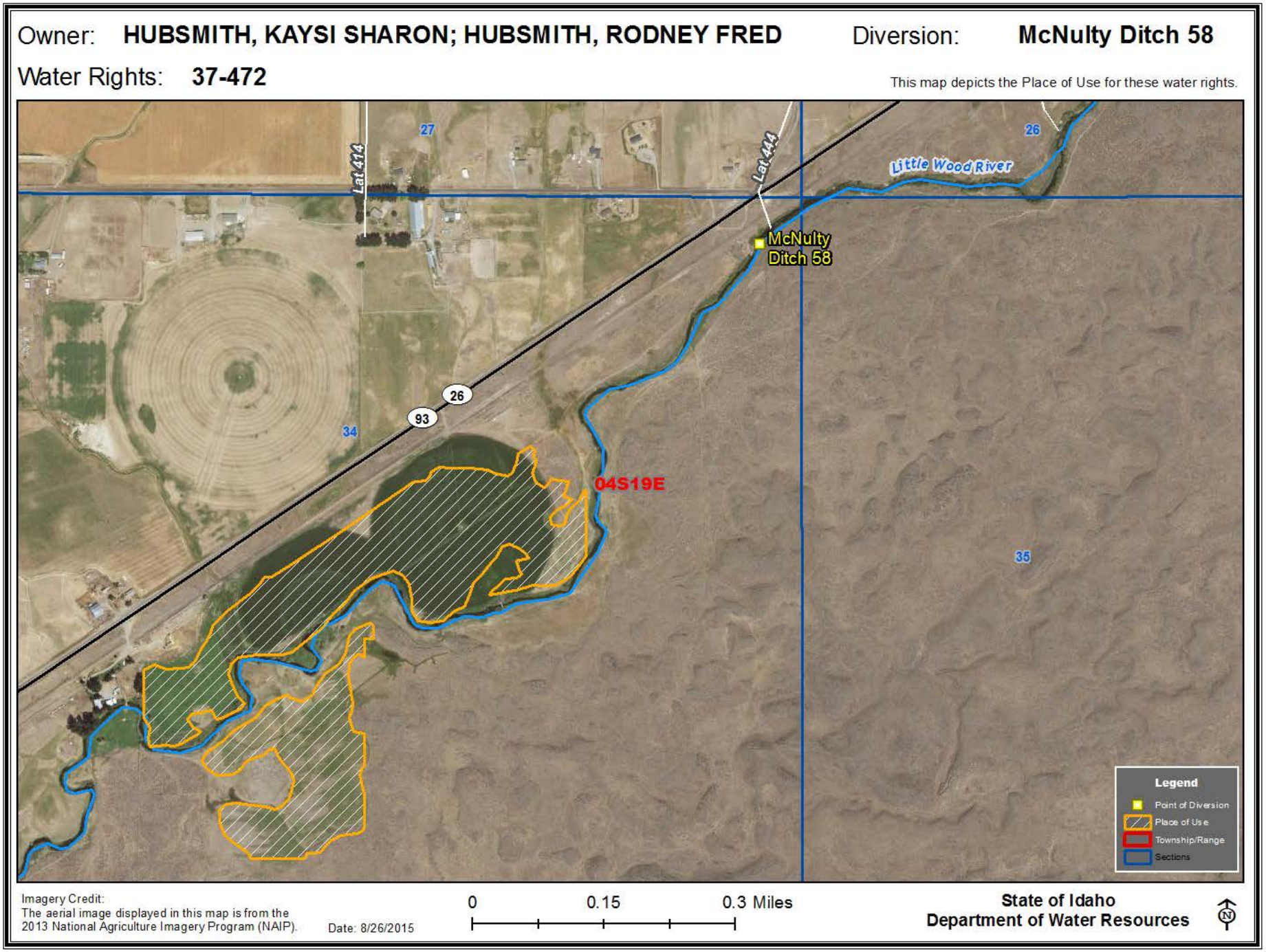
Additional Comments: Water right includes 48.9 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 48.9 acres. The POU has had minor changes to the areas irrigated. Approximately 7.0 irrigated acres were found to be outside current water right boundaries. A transfer may need to be filed. Data based on 2013/2015 NAIP imagery and Landsat imagery for June/July 2015.

Missing field photo of orifice-control box.

1. McNulty 58: diversion dam across river, to open ditch and orifice-control box located in trees/bushes on right hand side of photo (north of river)

2. McNulty 58: diversion dam across river, from below dam and north of river

3. McNulty 58 ditch: pipeline intake located about 20 ft below orifice-control box.


Owner: HUBSMITH, KAYSI SHARON; HUBSMITH, RODNEY FRED
Diversion: McNulty Ditch 58
Water Rights: 37-472
This map depicts the Place of Use for these water rights.
Lat 414
Lat 444
27
26
Little Wood River
McNulty Ditch 58
26
93
34
04S19E
35
Legend
Point of Diversion
Place of Use
Township/Range
Sections
Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).
Date: 8/26/2015
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State of Idaho
Department of Water Resources
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Owner: Barbara Farms, LLC
Water Right Number(s): 37-344A (4/6/1883; 4.0 cfs), 37-973 (4/1/1884; 2.0 cfs)
Diversion Names: Meyers 73, Meyers 74, Meyers 75 and Meyers 75P
Field Visit Date: 05/26/2015 (Meyers 75 & 75P), 07/02/2015 (Meyers 73 & 74)
Diversion Location: Four diversions about 3 to 4 miles west of Shoshone, and 1 mile north of Highway 26 off Bryant Rd. Diversions and places of use are located below Milner Gooding Canal.

Combined/Other Water Rights & Sources: Both Little Wood River rights include BWCC combined use condition (S05). IDWR staff review verified 200 shares/acres of BWCC-AFRD2 matching water rights place of use as per BWCC-AFRD2 records, confirming information submitted by BWLWWUA (actual or new certificate number is 12401; BWLWWUA identified old number 10071). Staff further verified BWLWWUA information that shares to this same land is limited as per a contract between former land owner and BWCC, specifically that shares are limited to storage water from Magic Reservoir at 1.5 acre-feet per acre (200 x 1.5 = 300 AF), which approximately matches the 314 AF limit per season identified by BWLWWUA.
Owner has Big Wood River right 37-59D (5/27/1899, 0.38 cfs) appurtenant to the same place of use and combined with Little Wood River rights. This is one of the 'Cottonwood Decree' rights but was not included in BWLWWUA delivery call.

Diversion Description: There are four diversions associated with these water rights as follows:

a) Meyers 73 Ditch: A steel frame screw top slide gate located on river diversion dam and control for upstream power plant diverts water to an open ditch. A concrete orifice-gate box is located just below gate from hydro plant diversion for measurement and control. Water from this point flows through open ditch about 1,100 ft to a bubbler pipe for screening debris; bubbler then splits to a 24-inch pipe that crosses the river south and drops into a box and 12-inch PVC pipe to gated pipe at field for flood irrigation of about 20 acres south of river (alfalfa). The second pipe from bubbler goes to a 12-inch PVC pipe on north side of river to gated pipe for flood furrow irrigation of about 32 acres (beans).

b) Meyers 74 Ditch: Rock diversion dam across river checks water to a ditch heading on south side of river to concrete orifice-gate box with steel frame slide gate and hand wheel for control to open ditch which is earthen for short distance than concrete lined a distance of perhaps 0.25 miles to a pond with a 10 HP centrifugal re-lift pump.

c) Meyers 75 Ditch: Channel or ditch on north side of river is diverted by concrete check structure and orifice-gate box with a wooden gate across the front of the box has a submerged orifice opening for measurement and a steel frame slide gate and hand wheel for control. Water discharges to open ditch for about 600 ft to irrigation system with pond, bubblers and re-lift pumps to pressurize pivots; system includes gated pipe flood irrigation.

d) Meyers 75P Pump: A concrete diversion box with steel slide gate on south side of river diverts water to small pond with intake pipe to centrifugal pump for pressurized irrigation system.

Measuring Device:

a) Meyers 73 Ditch: Wooden submerged orifice in orifice-gate box at head of ditch (orifice size not obtained).

b) Meyers 74 Ditch & Pump: Adjustable submerged orifice in orifice gate box at head of ditch and McCrometer propeller flow meter on mainline discharge pipe below centrifugal pump. Meter reading 375 gpm at time of visit. Meter/pipe includes straightening vanes to compensate for lack of straight pipe upstream of meter.
c) Meyers 75 Ditch: Wooden submerged orifice, 1.25 ft square opening.
d) Meyers 75P Pump: McCrometer meter installed on mainline (6 to 8 inch) below pump and above dragon filter.

Water District 37 combines measurements from all four diversions into one annual summary report, but also provides separate reports tracking river right delivery, BWCC/Magic Reservoir storage use delivery and any Snake River rental water use or delivery.

Conveyance & Irrigation System:

a) Meyers 73 Ditch: See diversion description above – open ditch to bubbler, split pipeline to gated pipe flood irrigation field south of river (20 acres), and 12 inch pipe to gated pipe flood furrow irrigation fields (32 acres) north of river.
b) Meyers 74 Ditch & Pump: Open ditch to pond and re-lift pump to pressurized irrigation system including 4 tower center pivot with end gun and hand lines (potatoes, alfalfa and peas).
c) Meyers 75 Ditch: From diversion box, gravity flow 600 ft to pond with bubbler and re-lift pumps to pressurize center pivots; pond also discharges to gated pipes for flood irrigation of furrow and border fields between or around pivots. A second bubbler and re-lift pump system is located further west for additional pivot. System includes 3 center pivots.
d) Meyers 75P Pump: Pump discharges to pressurized irrigation system including hand lines.

Additional Comments: Water right includes 301.9 acres of irrigation use. Actual irrigated area within the water right boundaries are less than 301.9 acres as per review of 2013/2015 NAIP imagery and Landsat imagery for June/July 2015. The POU has had minor changes to the areas irrigated. Approximately 13.0 irrigated acres were found to be outside current water right boundaries until a water right transfer was approved on August 18, 2015, to correct diversion points and some places of use. About 2 acres may be irrigated outside of approved transfer place of use in 2015 and also outside of BWCC-AFRD2 boundary.

1. Meyers 73: diversion dam and control gate to ditch.

2. Meyers 73: orifice-gate box.

3. Meyers 73: Bubbler to pvc pipe and gated pipe flood irrigation fields north of river, steel pipe on left of photo goes south of river to gated pipe and flood irrigation field.

4. Meyers 74: orifice-gate box.

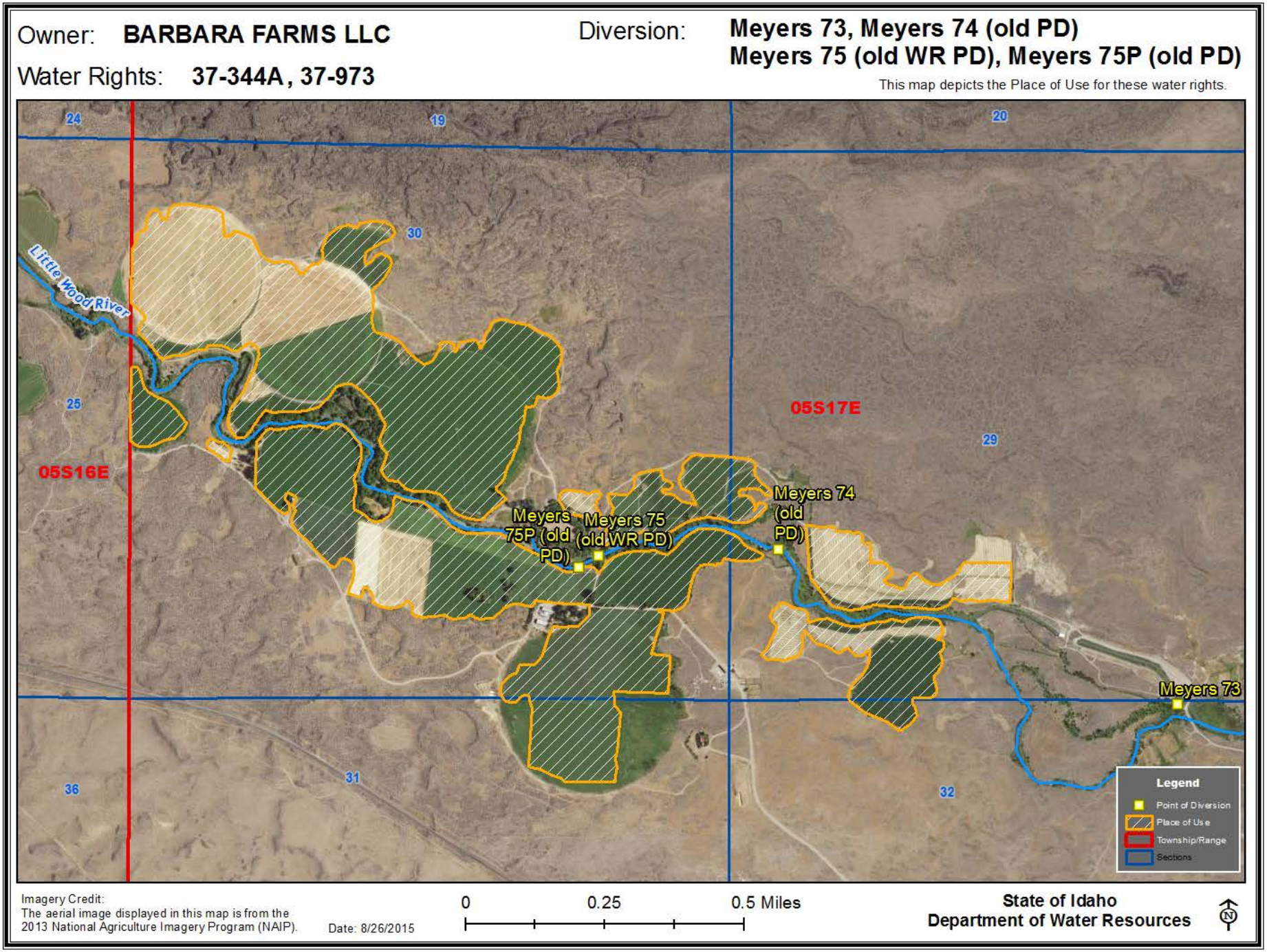
5. Meyers 74: re-lift pump to pivot and hand lines, pond in background (not visible), centrifugal pump in foreground under whit canopy, to mainline with Mcrometer meter.

6. Meyers 74: re-lift pump to corner hand lines and pivot (to left of photo)

7. Meyers 75P: pond (not visible) in background to pump, mainline wit meter, filter and pressurized irrigation system including hand lines.

8. Meyers 75: Open ditch/channel from river to diversion check structure with stop logs for spill to river or diversion to orifice-gate box in foreground, then to open ditch and irrigation systems.

9. Meyers 75: one of two bubbler and re-lift pump systems.


Owner: BARBARA FARMS LLC
Water Rights: 37-344A, 37-973
Diversion: Meyers 73, Meyers 74 (old PD)
Meyers 75 (old WR PD), Meyers 75P (old PD)
This map depicts the Place of Use for these water rights.
24
19
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Little Wood River
25
05S16E
05S17E
29
Meyers 75P (old PD)
Meyers 75 (old WR PD)
Meyers 74 (old PD)
Meyers 73
36
31
32
Legend
Point of Diversion
Place of Use
Township/Range
Sections
Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).
Date: 8/26/2015
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State of Idaho
Department of Water Resources
N

Owner: Ritter, James B.
Water Right Number(s): 37-49 (4/1/1883; 4.2 cfs)
Diversion Name: Ritter Ditch 65
Field Visit Date: 07/02/2015
Diversion Location: Diversion from Little Wood River about 9.2 miles southwest of Richfield. Diversion and POU located above Milner Gooding Canal.

Combined/Other Water Rights & Sources: Right 37-49 is not combined with any other rights and the right includes no condition about being combined with water from BWCC and/or AFRD2. IDWR staff did not find any BWCC-AFRD2 shares listed in BWCC-AFRD2 records for Ritter, although water right POU is within BWCC-AFRD2 boundaries. BWLWWUA did not identify any BWCC-AFRD2 shares with this right or POU.

Diversion Description: Concrete and stop log diversion dam across river diverts water to open ditch on south side of river with orifice-control box. Control box is concrete check structure (6 ft x 6 ft) with adjustable metal plate orifice opening on front (upstream) end and wooden leaf slide gate on downstream end with screw/hand wheel for gate control.

Measuring Device: Submerged orifice – 2 foot square opening. Assistant watermaster measured flow through orifice at time of visit (2.80 cfs). Orifice installation is acceptable for measurement.

Conveyance & Irrigation System: Assistant watermaster stated that the open ditch from the orifice-gate control box goes to a re-diversion pump downstream and pressurized irrigation wheel lines on both south and north side of river (pump station not visited or observed). Fields are about 21.1 acres (north) and 53.4 acres (south), or total of 75.4 acres, all in hay. Pump may be about 1 mile downstream of ditch heading.

Additional Comments: Water right includes 215.7 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 215.7 acres. The POU has had minor changes to the areas irrigated. Approximately 4.5 irrigated acres were found to be outside current water right boundaries. A transfer may need to be filed. Data based on 2013/2015 NAIP imagery and Landsat imagery for June/July 2015.

Right is limited to 4.07 cfs when diverted from pump in Little Wood River. Right includes four PODs but only two are used. Irrigated wheel line field north of river does not conform to water right POU.

1. Ritter Ditch 65 diversion dam.

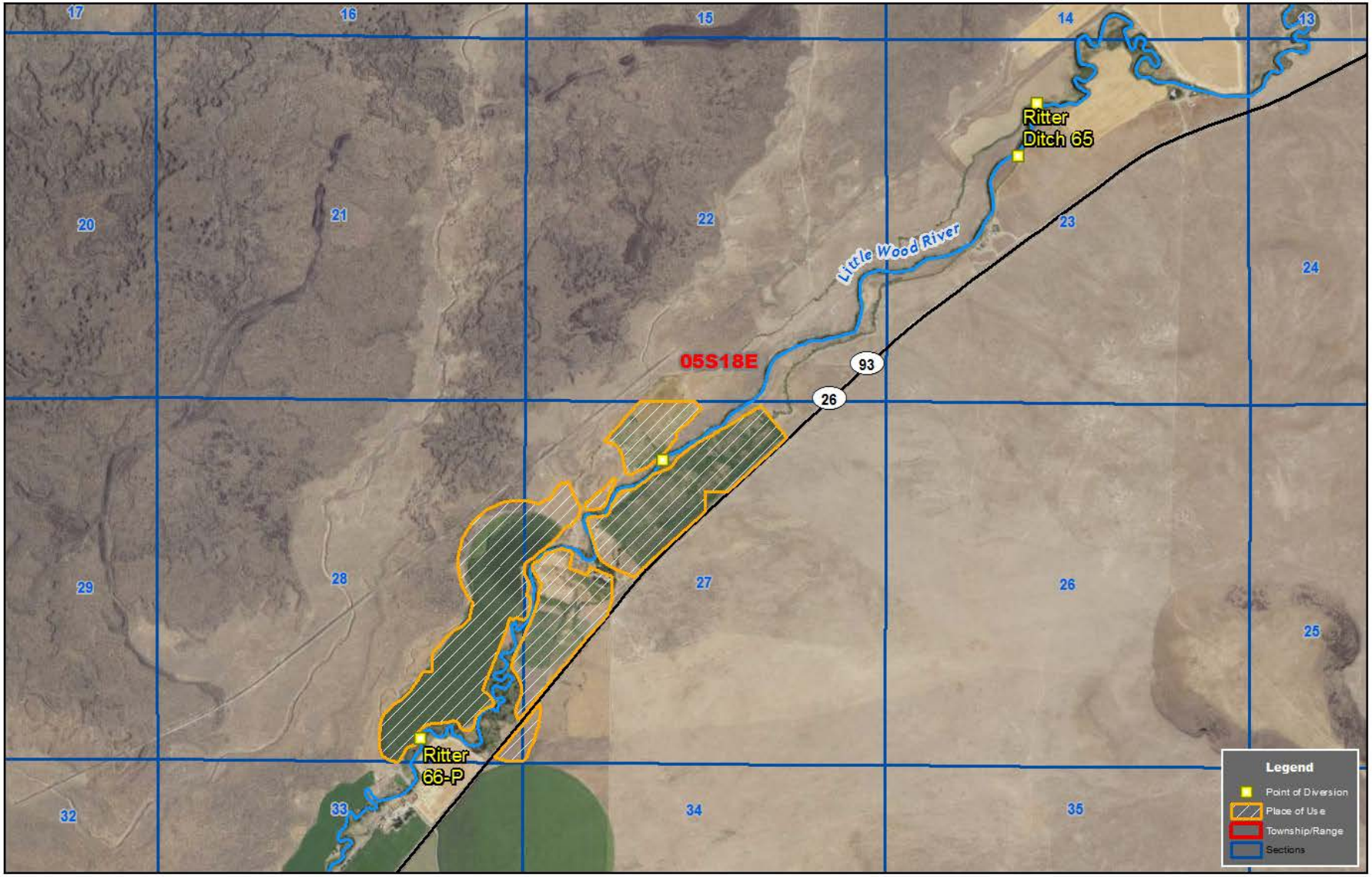
2. Ritter Ditch 65 orifice gate control box.

Owner: **RITTER, JAMES B; RITTER, LINDA**

Diversion: **Ritter 66-P, Ritter Ditch 65**

Water Rights: **37-49**

This map depicts the Place of Use for these water rights.



Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 2,250 4,500 Feet

State of Idaho
Department of Water Resources

Owner: Ritter, James B.
Water Right Number(s): 37-49 (4/1/1883; 4.2 cfs)
Diversion Name: Ritter 66-P
Field Visit Date: 07/02/2015
Diversion Location: Diversion from Little Wood River about 11.5 miles southwest of Richfield. Diversion and POU located above Milner Gooding Canal.

Combined/Other Water Rights & Sources: Right 37-49 is not combined with any other rights and the right includes no condition about being combined with water from BWCC and/or AFRD2. IDWR staff did not find any BWCC-AFRD2 shares listed in BWCC-AFRD2 records for Ritter, although water right POU is within BWCC-AFRD2 boundaries. BWLWWUA did not identify any BWCC-AFRD2 shares with this right or POU.

Diversion Description: Intake pipe from river to CMP well/standpipe to a 50 HP vertical turbine pump which pressurizes irrigation mainlines to pivots and hand lines.

Measuring Device: Seametrics 10 inch Magnetic flow meter installed on mainline. This is a standard mag meter on IDWR approved flow meter list. Meter installation acceptable except meter should be turned to 10 or 2 o'clock position as per meter manufacturer recommendation but measurement should be good. Meter reading approximately 786 gpm at time of visit.

Conveyance & Irrigation System: 10 inch mainline from pump discharges to two pivots and some hand lines on north side of river (all corn crop at time of visit). Assistant watermaster stated a short third pivot across the river is connected to this system (appeared to be mix of grain and pasture as per imagery, does all appear to be well watered; this pivot is within water right POU). North pivots and hand lines is about 71 acres, and pivot area south of river about 13 acres (84 acres total). With Ritter 65, total irrigated area about 159 acres (water right is 215.7 acres).

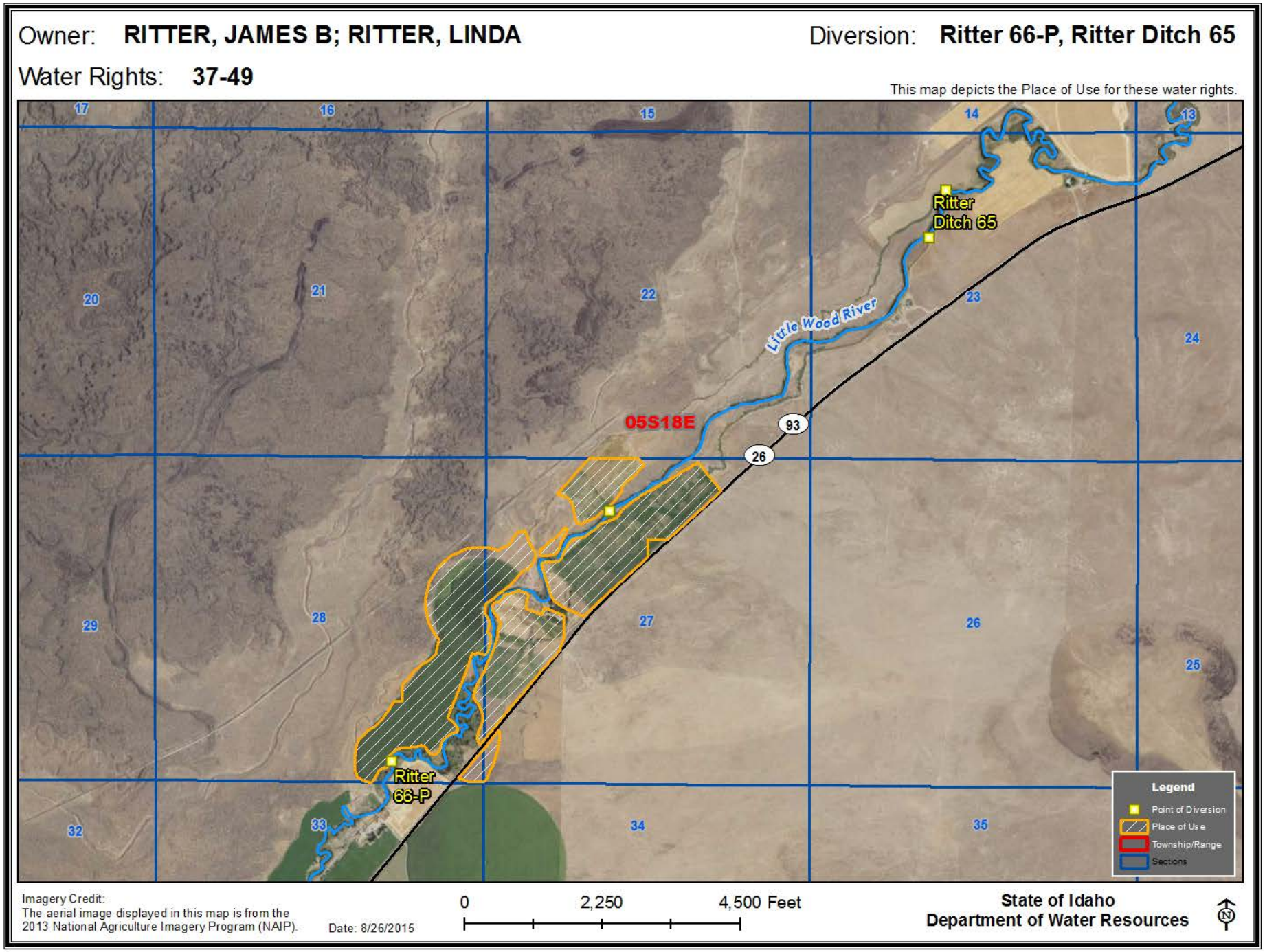
Additional Comments: Water right includes 215.7 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 215.7 acres. The POU has had minor changes to the areas irrigated. Approximately 4.5 irrigated acres were found to be outside current water right boundaries. A transfer may need to be filed. Data based on 2013/2015 NAIP imagery and Landsat imagery for June/July 2015.

Right is limited to 4.07 cfs when diverted from pump in Little Wood River. Right includes four PODs but only two are used. Water District 37 combines measurements of Ritter 65 and Ritter 66-P into one daily delivery record and annual report.

1. Ritter Pump 66: intake pipe from river to pump.

2. Ritter Pump 66: CMP well to vertical turbine 50 HP pump, connected to dragon filter (background, left) and mainline (right, with 10 inch Mag meter).

3. Ritter 66 Pump: dragon filter in foreground, 10" mainline and mag meter in background to pivots and hand lines.


Owner: RITTER, JAMES B; RITTER, LINDA
Diversion: Ritter 66-P, Ritter Ditch 65
Water Rights: 37-49
This map depicts the Place of Use for these water rights.
Ritter Ditch 65
Little Wood River
05S18E
93
26
Ritter 66-P
Legend
Point of Diversion
Place of Use
Township/Range
Sections
Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).
Date: 8/26/2015
0
2,250
4,500 Feet
State of Idaho
Department of Water Resources

Owner: City of Shoshone
Water Right Number(s): 37-691B (4/1/1885; 0.24 cfs)
Diversion Name: Rose 69-P7
Field Visit Date: 07/02/2015
Diversion Location: Diverts from south side of river on west side of City. Diversion and POU located below Milner Gooding Canal.

Combined/Other Water Rights & Sources: No other water rights and no BWCC-AFRD2 shares or water.

Diversion Description: Intake pipe from river to 7.5 HP centrifugal pump and 4 inch mainline discharge pipe to sprinkler irrigation system.

Measuring Device: No flow meter or other measuring device is installed. Water district records constant daily flow rate of 0.24 cfs, which matches water right rate of diversion. District may monitor when pump is on and off.

Conveyance & Irrigation System: Pressurized mainline from pump discharges water to two large moveable impact sprinkler guns and several short hand lines with individual rain bird type nozzles. Irrigate area is about 6 acres, all pasture (water right is for 7 acres).

Additional Comments: Water right includes 7.1 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 7.1 acres.

1. Rose 69-P7 pump: 7.5 HP centrifugal pump to 4 inch mainline.

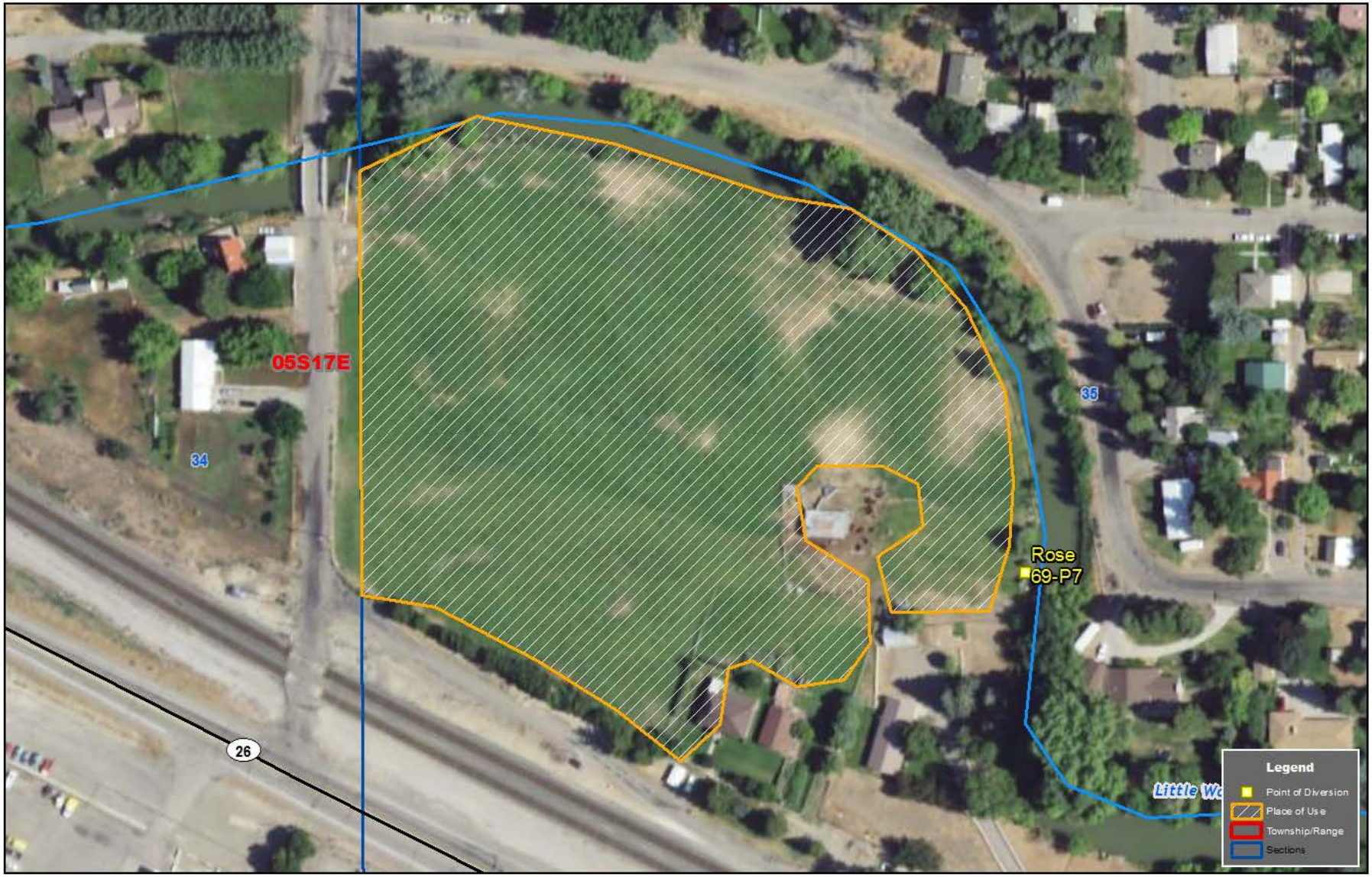
2. Rose 69-P7 Pump, irrigated pasture with 2 large sprinkler guns in background.

Owner: **ROSE, KENNETH O; ROSE, MARY D**

Diversion: **Rose 69-P7**

Water Rights: **37-691B**

This map depicts the Place of Use for these water rights.



Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 0.0275 0.055 Miles

State of Idaho
Department of Water Resources

Diversion Name: Slough Ditch 93
BWLWUA Water Right Owner(s) at this diversion: Astle, Bradley J.; Pierce, Joyce A.; Barnett, Delbert; Big Wood Canal Company (BWCC); Church of the Nazarene; Garza, Roman; and McDade, Ernest & Joyce.
Water Right Number(s): 37-21650 (Astle & Pierce); 37-22178 (Barnett); 37-13111, 37-21401, 37-21402, 37-21403, 37-21404, & 37-21405 (BWCC); 37-194B (Nazarene); 37-20847 (Garza). See Attachment 2 for individual water right priority dates and rates of diversion.
Field Visit Date: 06/26/2015 (Visited canal heading, plus Astle and Garza parcels. Barnett, McDade and Church parcels were not visited).

Diversion Location: About 2.1 miles east of Gooding on Little Wood River. Diversion and places of use are all located below Milner Gooding Canal.

Combined/Other Water Rights & Sources: The five privately held water rights referenced above share the Slough Ditch as a point of diversion with the BWCC Little Wood River rights and numerous other private held rights having various priority dates. BWCC-AFRD2 water supplies are delivered to the Slough Ditch. All five or the privately held rights have the AFRD2 exchange condition (water right condition no 161). Two of the five private rights (Barnet and McDade) have a water right condition indicating that use is combined with water from BWCC.

Diversion Description: Concrete check dam with wood stop logs across river diverts water to a concrete control structure at the head of the ditch. The control has a steel slide gate with hand wheel for control. Water can spill back to the river through a similar gate just above the main ditch control.

Measuring Device: Slough Ditch: A 5 ft rectangular contracted weir in ditch about 30 ft below head gate control structure. Weir has sharp edge plate on sides but edge on right side (looking upstream) is flush with concrete which affects good contraction and aeration over weir crest. Gage reading was 0.86 ft (12.8 cfs).

Conveyance & Irrigation System: Open earthen ditch to re-diversion head gates and laterals.

Additional Comments: BWLWWUA information response included no information for rights owned by Astle, Garza, and Church of the Nazarene.

37-21650 (Astle & Pierce): Water right includes 1.4 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 1.4 acres. Property is well irrigated per 2013 imagery. The property was likely irrigated using a ground water well. This parcel is at tail end of Slough Ditch. The watermaster and assistant watermaster both stated that they have never observed water from Slough Ditch conveyed to this parcel. The watermaster thought it was not physically possible to convey water to the parcel or this end of the Slough Ditch. Field visit confirmed ditch is dry and not likely used for a number of years.

37-22178 (Barnett): Water right includes 2.1 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 2.1 acres. Barnett owns BWCC-AFRD2 shares for other areas/parcels.

37-194B (Nazarene): Water right includes 20.0 acres of irrigation use. No irrigation at POU per 2011-2014 imagery.

37-20847 (Garza): Water right includes 3.8 acres of irrigation use. POU did not appear to be irrigated on 06/26/15 field visit. A transfer was approved in 2004 to move the POD from the Slough Ditch to a point on the Little Wood River near the place of use but the transfer apparently was not accomplished as a pump conveyance was not observed at field visit and both the watermaster and assistant watermaster were not aware of any pump installation on the river for this right and parcel.

37-609B (McDade): Water right authorizes 10 acres. Actual irrigated area is 9 to 10 acres using wheel and hand lines as per 2013–2015 imagery.

1. Slough Ditch 93: diversion/check dam across river; slide gate on right and stop logs control return flow to river.

2. Slough Ditch 93: control structure and head gate controls flow to ditch.

3. Slough Ditch 93: 5 ft rectangular weir in ditch about 30 ft below head gate.

4. Slough Ditch 93: view of 5 ft rectangular weir from downstream.

Owner: Big Wood Canal Company
Water Right Number(s): 37-13111 (12/24/1906, 75cfs); 37-21401 (5/15/1885, 5.3 cfs); 37-21402 (4/6/1883, 3.55 cfs); 37-21403 (4/1/1887, 5.2 cfs); 37-21404 (7/1/1896, 15.3 cfs); 37-21405 (4/1/1884, 2.61 cfs)
Diversion Name: South Gooding Main Canal
Field Visit Date: 08/18/2015
Diversion Location: Diversion from Little Wood River about 4.25 miles east of Gooding. Diversion and POU located below Milner Gooding Canal.

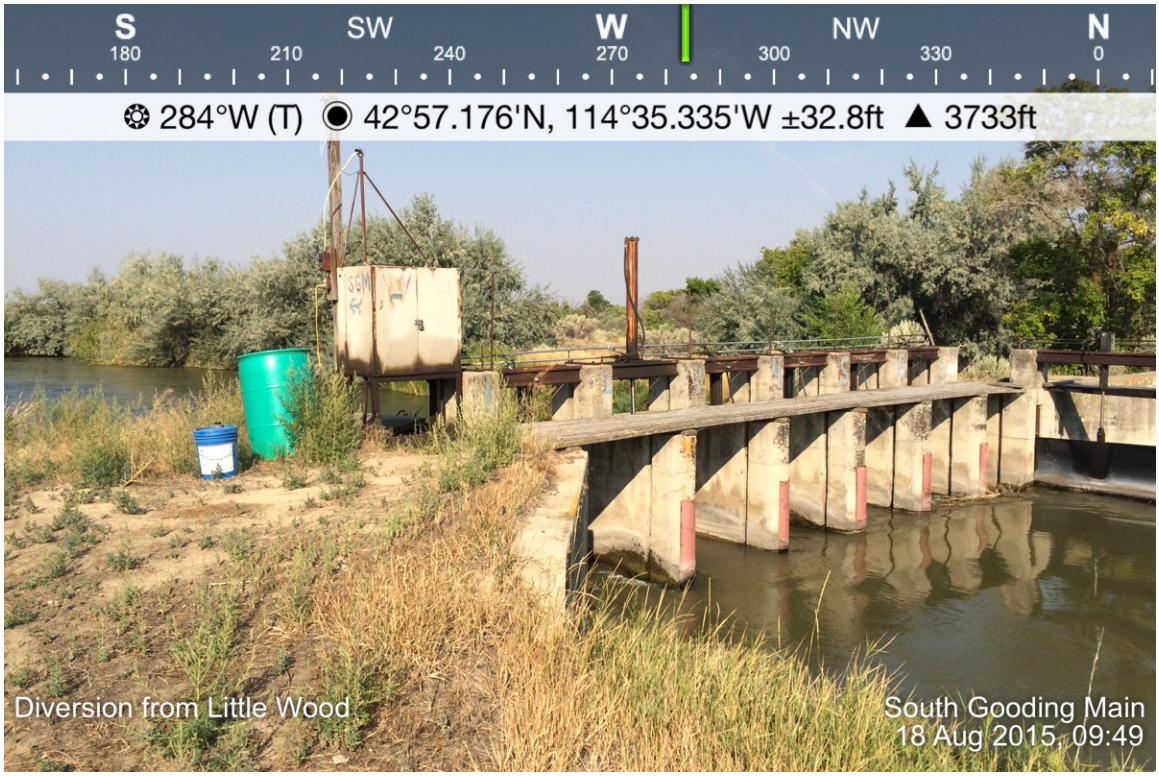
Combined/Other Water Rights & Sources: This is one of the larger diversions for the Big Wood Canal Company from the Little Wood River. There are a number of other private water rights that are delivered through the South Gooding Main Canal along with BWCC-AFRD2 water supplies. If private held water rights are included in the water call, they have been identified and addressed in other documents. The watermaster also reported that the Big Wood Canal Company water rights are only delivered during periods of high flow in the Little Wood River with the exception of the winter stockwater right (37-13111).

Diversion Description: Concrete structure with a series of 6 hydraulically controlled head gates.

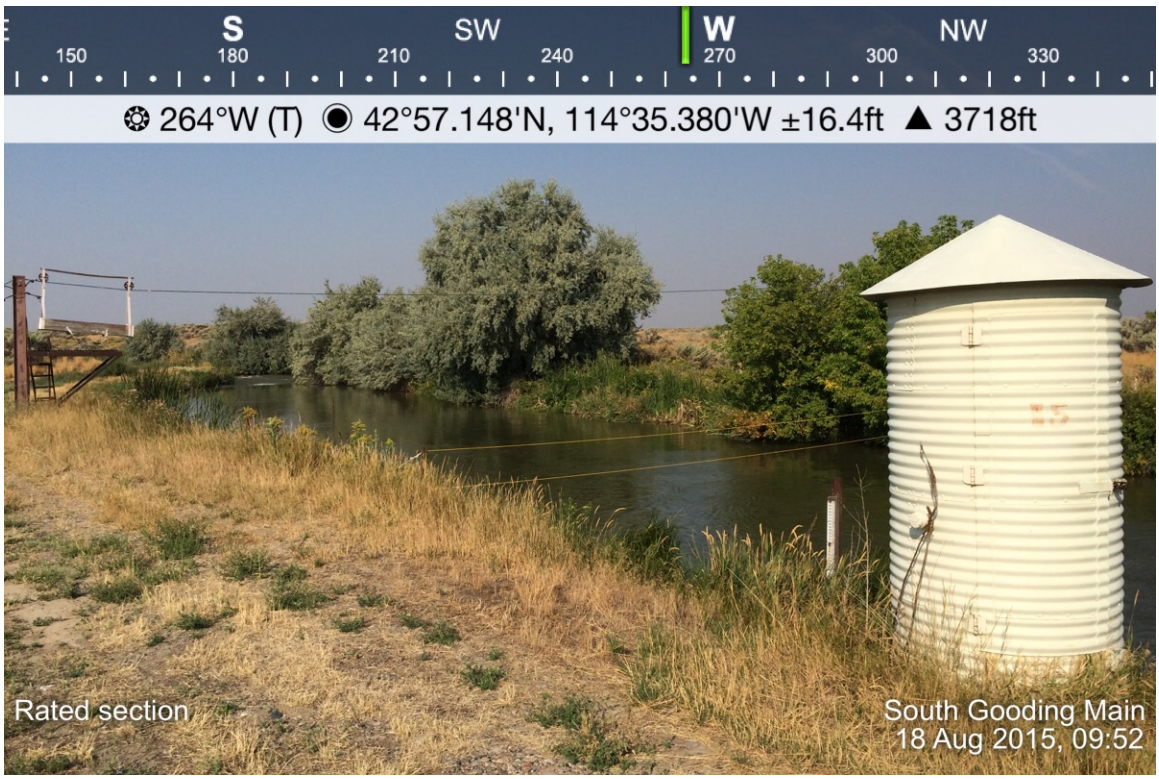
Measuring Device: Below the diversion head gates there is a rated section and gauge house which contains a Stevens type 'F' recorder. The rated section has a staff gauge and cables across the channel for taking measurements. The Stevens recorder in the gauge house is mechanically connected to the head gates and is set up to raise and lower the head gates depending on the amount of water flow in the South Gooding Canal.

Conveyance & Irrigation System: Main canal (open ditch) to various canal head gates and laterals within the BWCC-AFRD2 South Gooding Tract.

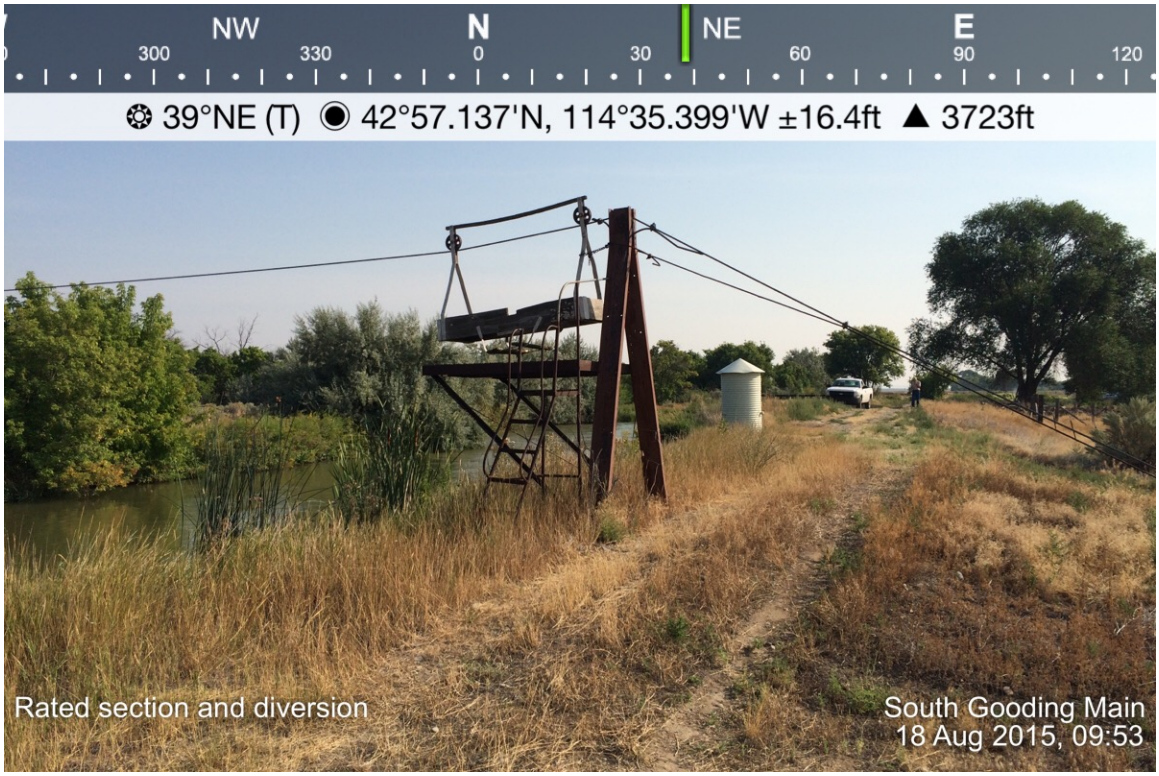
Additional Comments: N/A



1. South Gooding Main: head gates used to divert water from the Little Wood River. The Little Wood River is not pictured but is off to the right.



2. Looking down stream on the South Gooding Main, rated section for measurement (center), and gauging station for recording flows.



3. View looking up the South Gooding Canal, the head gates from the Little Wood River are just past the truck.

Owner: Koosh, Inc.
Water Right Number(s): 37-485 (4/1/1883; 1.1 cfs)
Diversion Name: Stock 71 and Stock 72 (also Stock 71A)
Field Visit Date: 07/29/2015
Diversion Location: 2 miles northwest of Shoshone, 0.1 mile north of Highway 26. POD and POU below Milner Gooding Canal.

Combined/Other Water Rights & Sources: Right includes condition S05 – use is combined with water from BWCC. IDWR staff review verified 40 shares/acres of BWCC-AFRD2 water as per BWCC-AFRD2 records, and as reported in information submitted by BWLWWUA.

Diversion Description: Stock 71: Rock ledge and timber/log wing dam in river checks water to open ditch with orifice gate-control box for measurement and control.

Stock 72: Water right diversion point is at diversion to hydro power plant. Assistant watermaster showed IDWR staff an intake pipe from hydro power plant forebay to CMP with pipe gate valve that discharges to an open ditch that appears to go south toward Highway 26 and over to NWNW and/or SWNW of Section 28. This ditch does not seem to irrigate lands under right 37-485. It is not clear if another pipe or diversion to POU is located further up the forebay channel.

Stock 71A: The assistant watermaster showed IDWR staff a diversion ditch north of the river less than 0.1 mile north of the hydro diversion dam. This ditch appears to head off the river from a diversion dam in the very corner of the SESWSE of Section 28 and flood irrigates a field north of the river within the water right POU between the ditch heading and the hydro plant diversion. This ditch heading is not described as an authorized POD on right 37-485. The ditch also appears to extend northwest about 460 yards where it drops down an embankment further to the northwest to irrigate a small field about 0.6 miles to the west – this field is not within the POU of 37-485 but is within the BWCC-AFRD2 boundary (uncertain if any shares describe the irrigated pasture field).

Measuring Device: Stock 71: Submerged orifice with 1.33 ft square opening. Opening is in steel plate across front of orifice-box.

Stock 72: The ditch has a 1 ft Cipoletti weir installed. Ditch was dry at time of visit and did not appear to have been recently used. The POU for this ditch was not observed and was not obvious.

Stock 71A: The ditch down the embankment that goes to the northwest had a 1 ft Cipolletti weir installed, the ditch measured 0.3 cfs. The water was not used to irrigate the field to the west but was running past the field as per assistant watermaster and presumably back to the river. Water can be controlled by gates at embankment and returned to the river near the hydro plant. Flow may have been gate leakage.

Water District 37 combines measurements of these ditches in one report.

Conveyance & Irrigation System: Stock 71: Flow form orifice-control box discharges to buried pipe that gravity flows to gated pipe for open and furrow flood irrigation of fields.

Additional Comments: Water right includes 55.0 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 55.0 acres based on review of 2013/2015 NAIP imagery and Landsat imagery for June/July 2015.

As per diversion descriptions above, the Stock 72 and 71A points of diversion may not be properly described by the water right. A point of diversion correction through water right transfer may be warranted.

1. Stock 71: Rock and log wing dam in river checks water to ditch and orifice-control gate.

2. Stock 71: Orifice-control box with submerged orifice for measurement and steel frame slide gate for control to buried pipe line and gated pipe for flood irrigation of nearby fields.

3. Stock 72: View of ditch (left of vehicles which are next to weir) from embankment of hydropower canal and gate valve in pipe to ditch.

4. Stock 72: Weir in ditch below hydro power canal.

5. Stock 71A: Control gate downstream of ditch heading off river, a return flow gate to left (not shown) can spill water back to the river.

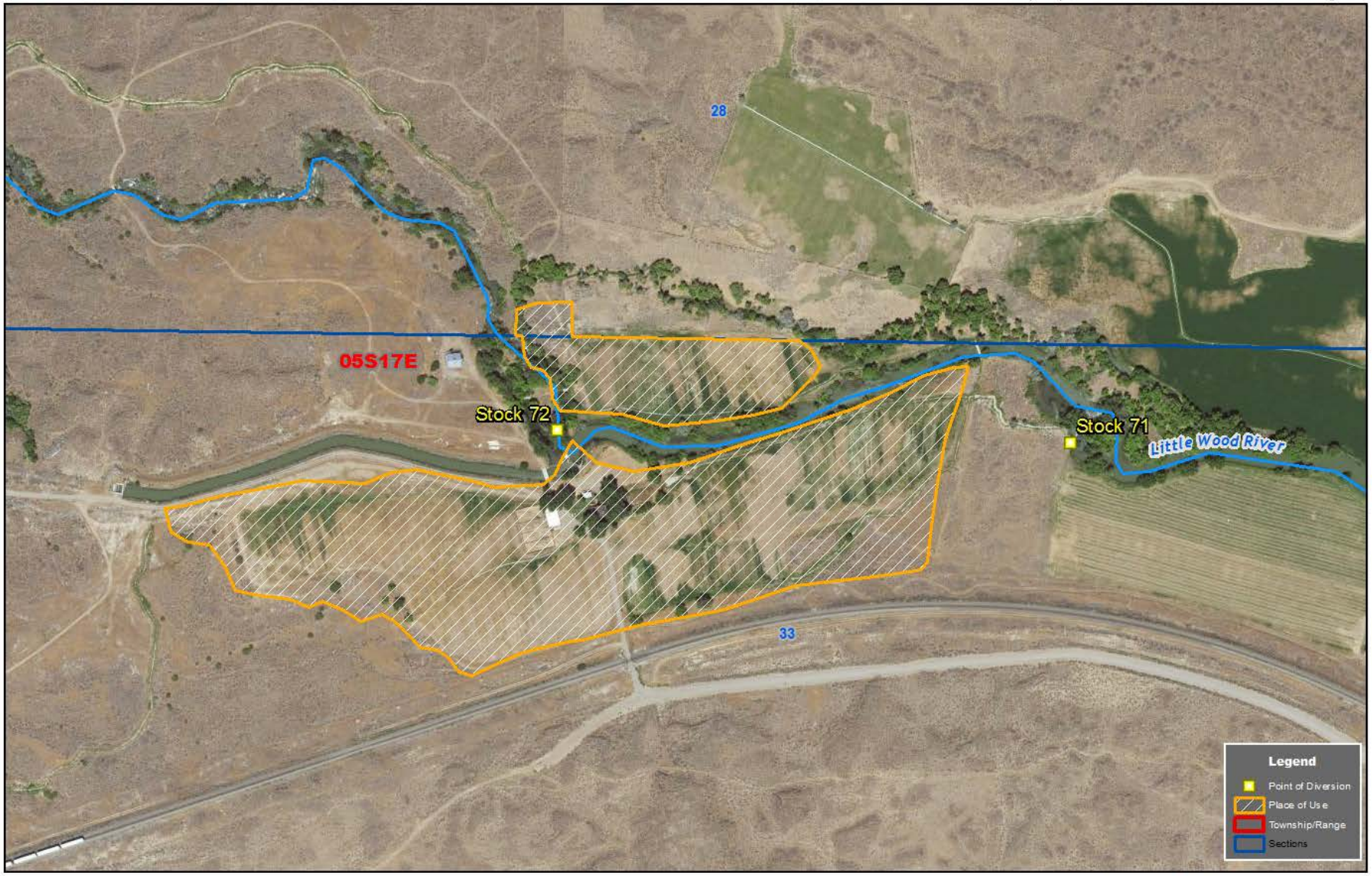
6. Stock 71A: Cipolletti ditch in weir (1 ft wide).

Owner: **KOOSH INC**

Water Rights: **37-485**

Diversion: **Stock 71**
Stock 72

This map depicts the Place of Use for these water rights.



Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 485 970 Feet

State of Idaho
Department of Water Resources

Owner: Taber, Donald E.
Water Right Number(s): 37-423 (4/1/1883; 0.3 cfs); 37-424 (4/1/1884; 2.2 cfs), 37-425 (4/1/1887; 2.2 cfs)
Diversion Name: Taber 66-P
Field Visit Date: 05/26/2015
Diversion Location: About 11.5 miles southwest of Richfield, and 4.5 miles east-northeast of Shoshone. Diversion and POU located above Milner Gooding Canal.

Combined/Other Water Rights & Sources: Right 37-423 is limited to 295 acres out of 327.2 acre place of use area. Rights 37-423, 37-424 and 37-59B have combined limit condition limiting total irrigation use to 295 acres in a single season. Right 37-423, 37-424, 37-59B and 37-425 are limited to a combined total of 327.2 acres in a season. All three rights include condition S05 – use is combined with water from BWCC. BWLWWUA identified 54 shares from BWCC-AFRD2 associated with lands described in these rights. IDWR staff confirmed BWCC-AFRD2 shares are associated with a portion of the lands under the water rights as per BWCC-AFRD2 records; shares are part of a larger certificate with additional lands for a total of 154.2 shares. Don Taber owns additional shares and certificates with BWCC-AFRD2 for additional lands. Ground water right 37- 8401 owned by Don Taber and Northwest Farm Credit Services is appurtenant to same 327.2 acres as above referenced rights but limited to 248 acres of 75% of the 327.2 acres. Ground water right 37-8401 includes Trust Water conditions.

Diversion Description: Intake pipe from river to concrete vault with two (2) vertical turbine pumps (Motor HP not obtained) which pressurizes irrigation mainlines. IDWR staff is not certain if or to what extent this pump diversion and irrigation system may be tied to Taber 66-P1 diversion and irrigation system which is a POD under the same water rights and located nearly a mile to the southwest. Ground water well authorized by right 37-8401 is next to this river pump and connects to a common mainline with river pump.

Measuring Device: A McCrometer propeller meter is installed on common mainline below both the river pump and well (10 to 12 inch line). The meter measures both surface water and ground water but the river flow is determined by subtracting the well meter (also a McCrometer meter). Meter installations generally appear acceptable although well meter did not appear to have adequate length of straight pipe downstream of the meter. Both river pump and well were off at date/time of visit but watermaster reported that meters are operable. McCrometer meters are not on IDWR approved flow meter list but generally acceptable if installed prior to IDWR's adoption of new meter standards and/or issuance of measurement orders.

Conveyance & Irrigation System: Common mainline from river pump and well pump distributes water to pressurized irrigation sprinkler systems including one pivot across Highway 26 and wheel/hand lines both north and south of river and either side of Highway 26.

Additional Comments: Water right includes 327.2 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 327.2 acres. The POU has had changes to the areas irrigated. Approximately 13.0 irrigated acres were found to be outside current water right boundaries. A transfer may need to be filed. Data based on 2013/2015 NAIP imagery and Landsat imagery for June/July 2015.

Diversion rates for all three rights are additive (4.7 cfs total). Right 37-59B, which is combined with these rights, was not included in the BWLWWUA delivery call. There are about 8 acres of

irrigation per 2015 and 2013 imagery that are not included on the water rights place of use (surface or ground water) and also not within either the BWCC or AFRD2 boundaries (about 2 acres in NENW and about 6 acres in N1/2SE of Sec 33, T5S 18E). There are another 1.6 acres in SWNW Sec 34 not within water rights POU but within BWCC-AFRD2 boundary. These areas are likely irrigated from the Taber 66-P diversion. About 22 to 28 acres of POU under these rights in NESE Section 32 are part of a larger pivot irrigation system that is not included under the water rights but included within the BWCC-AFRD2 boundaries and covered by BWCC-AFRD2 shares per BWCC-AFRD2 records.

1. Taber Pump 66-P: intake pipe in river to old orifice-gate box connected to pump vault.

2. Taber Pump 66-P (left): 1 of 2 vertical turbine pumps from open concrete vault connected to river intake pump. Turbine motor pumps water to mainline that connects to mainline from ground water well on right.

3. Taber 66-P: Pump on right (1 of 2 visible) with connected pipe that manifolds with pipe from ground water well (on left) to a common mainline that is buried to various irrigation sprinkler discharge points including a pivot, wheel lines and hand lines.

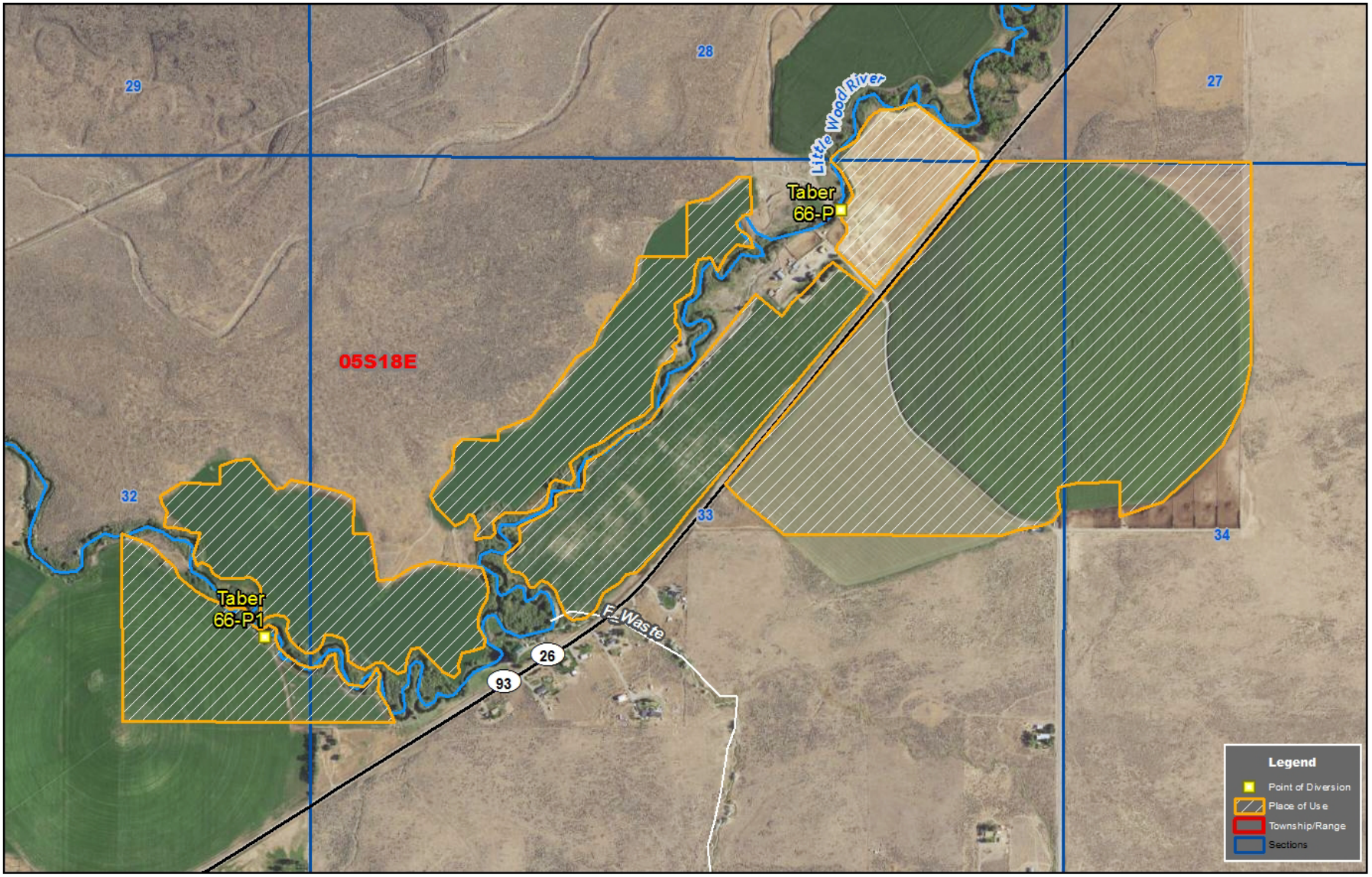
4. Taber 66-P: pump (left – 2 pumps visible from vault) and Taber ground water well (right) manifold into one common mainline to irrigation system discharge points. Note McCrometer meter in foreground on common mainline (measures both river and well water) and McCrometer meter in background on pipe from well.

Owner: **TABER, DONALD E**

Water Rights: **37-423, 37-424, 37-425**

Diversion: **Taber 66-P**
Taber 66-P1

This map depicts the Place of Use for these water rights.



Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 0.2 0.4 Miles

State of Idaho
Department of Water Resources

Owner: Taber, Donald E.
Water Right Number(s): 37-423 (4/1/1883; 0.3 cfs); 37-424 (4/1/1884; 2.2 cfs), 37-425 (4/1/1887; 2.2 cfs)
Diversion Name: Taber 66-P1
Field Visit Date: 07/02/2015
Diversion Location: About 3.7 miles east of Shoshone. Diversion and POU located above Milner Gooding Canal.

Combined/Other Water Rights & Sources: Right 37-423 is limited to 295 acres out of 327.2 acre place of use area. Rights 37-423, 424 and 37-59B have combined limit condition limiting total irrigation use to 295 acres in a single season. Right 37-423, 37-424, 37-59B and 37-425 are limited to a combined total of 327.2 acres in a season. All three rights include condition S05 – use is combined with water from BWCC. BWLWWUA identified 54 shares from BWCC-AFRD2 associated with lands described in these rights. IDWR staff confirmed BWCC-AFRD2 shares are associated with a portion of the lands under the water rights as per BWCC-AFRD2 records; shares are part of a larger certificate with additional lands for a total of 154.2 shares. Don Taber owns additional shares and certificates with BWCC-AFRD2 for additional lands. Ground water right 37- 8401 owned by Don Taber and Northwest Farm Credit Services is appurtenant to same 327.2 acres as above referenced rights but limited to 248 acres of 75% of the 327.2 acres. Ground water right 37-8401 includes Trust Water conditions.

Diversion Description: Concrete rectangular diversion box in south bank of river with wooden slide gate diverts water to small pond with an intake pipe connected to a CMP well/standpipe and a 75 HP vertical turbine pump that pumps water to an 8 inch mainline and dragon filter. Three main lines come off the filter to sprinkler systems that appeared to include at least 1 pivot and hand lines south of the river (grain), and an aluminum mainline that crosses the river to a field north of the river with a wheel line and possibly some hand lines. IDWR staff is not certain if or to what extent this pump diversion and irrigation system may be tied to Taber 66-P diversion system which is a POD under the same water rights and located nearly a mile to the northeast next to the ground water well authorized by right 37-8401.

Measuring Device: A McCrometer propeller meter is installed on the 8 inch mainline between the pump and the dragon filter. Adequate straight run of pipe both up and downstream of meter (86" up/42" down). Pump was running at time of visit to north mainline that crosses the river (flow rate not recorded). Meter installation is good for upstream/downstream straight run requirements. McCrometer meters are not on IDWR approved flow meter list but generally acceptable if installed prior to IDWR's adoption of new meter standards and/or issuance of measurement orders.

Conveyance & Irrigation System: Three mainlines from pump/dragon filter discharge water to pressurized irrigation sprinkler systems including at least one pivot next to pump station on south side of river and hand lines on south side of river around pivot (all in grain). One of these lines may also go to a second pivot further to east on Taber land. The third line is an aluminum mainline that goes north across the river to a wheel line and possibly some hand lines.

Additional Comments: See comments for Taber 66-P.

1. Taber Pump 66-P1: concrete diversion box in bank (background) diverts water to pond and pump intake.

2. Taber Pump 66-P1: 75 HP pump to 8 mainline with McCrometer flow meter.

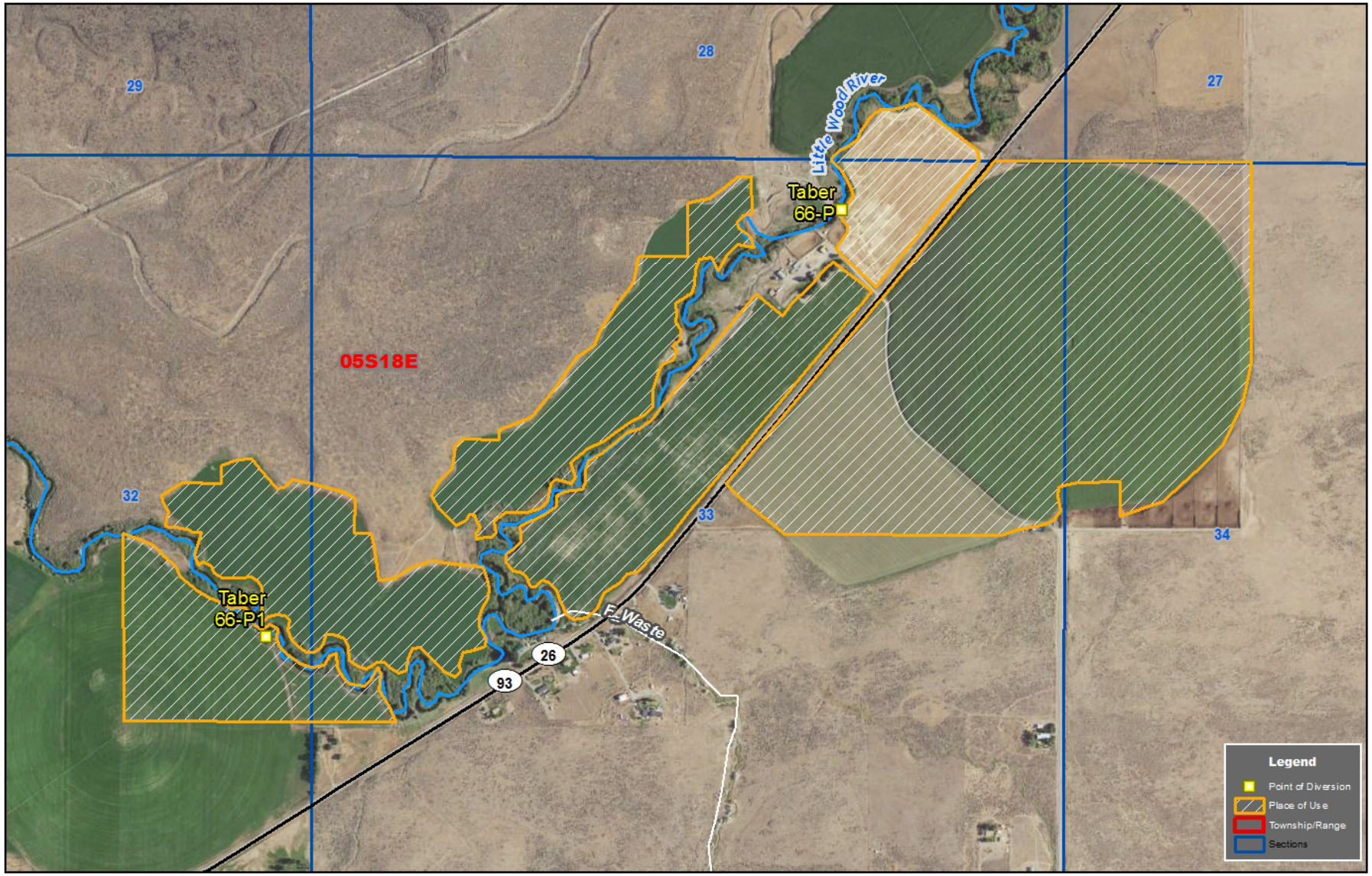
3. Taber 66-P1: Pump in background to mainline/dragon filter; three mainlines off dragon filter to irrigation sprinkler discharge points. Aluminum line off top of filter crosses river to north. Pivot (grain) behind pump.

Owner: **TABER, DONALD E**

Water Rights: **37-423, 37-424, 37-425**

Diversion: **Taber 66-P**
Taber 66-P1

This map depicts the Place of Use for these water rights.



Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 0.2 0.4 Miles

State of Idaho
Department of Water Resources

Owner: Brown, Jock & Cathy
Water Right Number(s): 37-1126 (4/8/1908; 0.8 cfs)
Diversion Name: Turner 61
Field Visit Date: 07/02/2015
Diversion Location: Diversion from Little Wood River **a**bout 5.2 miles southwest of Richfield. Diversion and POU above Milner Gooding Canal.

Combined/Other Water Rights & Sources: No other decreed natural flow river rights at this POD. Water right conditions S03 – use is combined with water from AFRD2, and S05 – use is combined with water from BWCC. IDWR staff confirmed that BWCC-AFRD2 shares are appurtenant to same water right POU (18 shares under Cert 12061 – matches BWLWWUA information).

Diversion Description: Concrete diversion dam across river side channel (main dam on river not observed) checks water to orifice-control box on south side of channel and river. Orifice-control box is concrete with orifice opening upstream in wooden leaf gate, and Waterman screw gate and culvert on downstream end of box for control.

Measuring Device: Submerged orifice – 1 foot square opening. Assistant watermaster measured flow through orifice but measurement not recorded by staff. Orifice installation is acceptable for measurement but should have sharp edged rectangular opening if not already installed.

Conveyance & Irrigation System: Waterman gate/culvert is connected to buried mainline (approximately 15 inch diameter plastic ribbed pipe) that goes about 160 yards and connects to 10 inch gated pipelines for flood irrigation of pasture field. Gated mainline connects to open ditch near old stone house to flood irrigate pasture between house and highway. Also observed pasture field behind or south of stone house with ditch conveyance but area looked poorly watered. Total irrigated area appeared to be approximately 20 to 25 acres at most.

Additional Comments: Water right includes 40.0 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 40.0 acres. Water right POU includes field south of river but field did not appear to be irrigated per 2015 imagery. Water right POU is irregular polygon shape fields overlapping pivot area. Water right place of use should be updated. Place of use transfer recommended. Most of the pivot POU is within BWCC POU boundary but not in AFRD2 POU boundary. This is one of two areas where BWCC and AFRD2 water right POU boundaries do not match.

1. Turner 61: diversion dam across side channel of river, to open orifice-control box.

2. Turner 61: orifice-head gate control box, buried mainline connected to head gate.

3. Turner 61: mainline from control box to gated pipes and irrigated pasture in background. Pipe on left connects to open ditch near old stone house (not pictured).

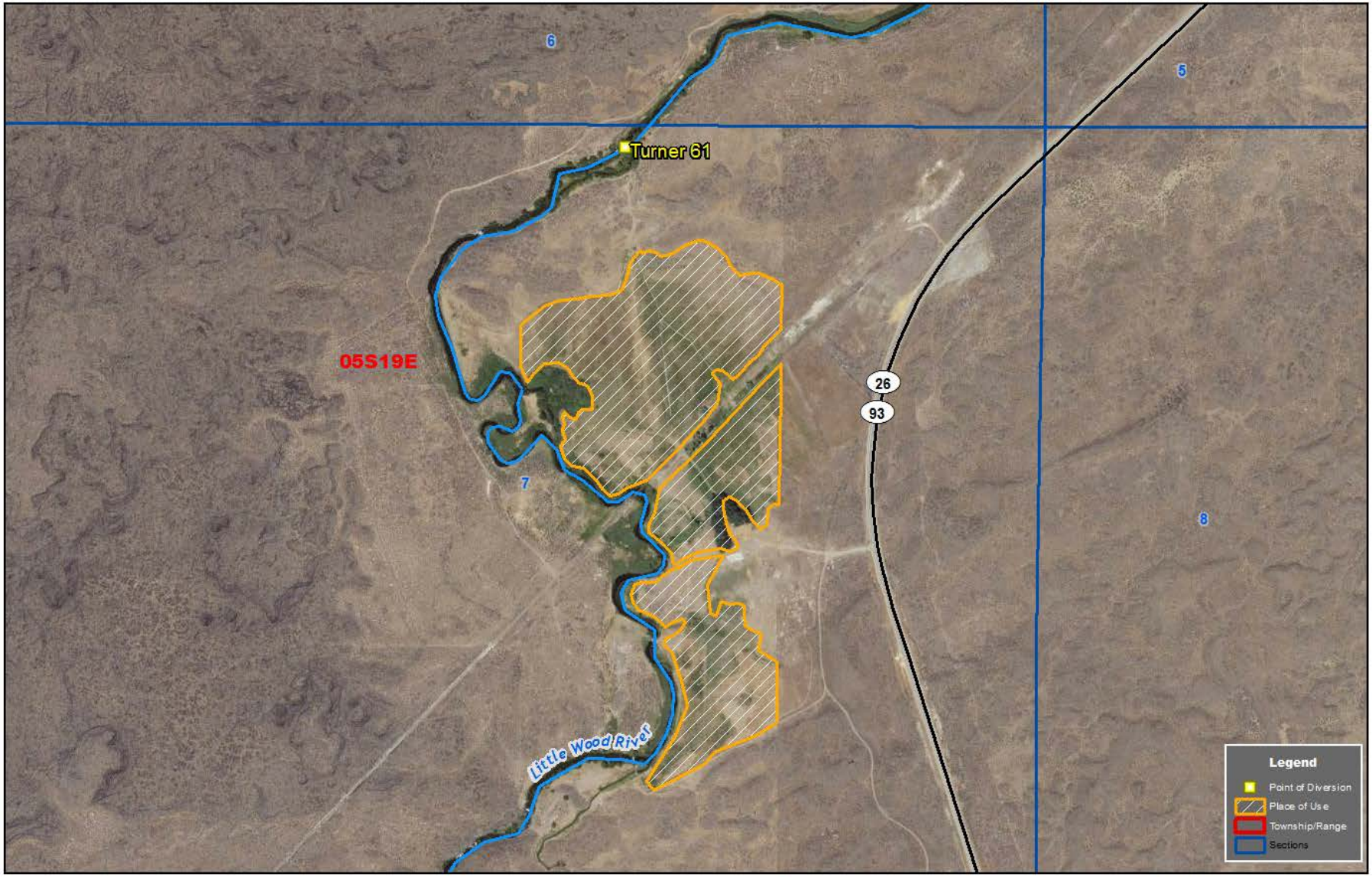
4. Turner 61: view of flood pasture field and end of one of the gated pipes.

Owner: **BROWN, CATHY M; BROWN, JOCK S**

Diversion: **Turner 61**

Water Rights: **37-1126**

This map depicts the Place of Use for these water rights.



Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 0.125 0.25 Miles

State of Idaho
Department of Water Resources

Owner: Stennett, Michelle
Water Right Number(s): 37-10561A (45/5/1884; 4.0 cfs); 37-10561B (5/5/1884; 2.2 cfs)
Diversion Name: White 68-P1 & P2
Field Visit Date: 07/02/2015
Diversion Location: About 1.3 mile northeast of Shoshone. Diversion and POU located below Milner Gooding Canal.

Combined/Other Water Rights & Sources: See White 68-P.

Diversion Description: A rock/earthen weir dam across river checks water to cut in north bank of river to small pond with pipe intake to a CMP vault in concrete pad that holds water for two vertical turbine motors and pumps that discharge through two separate 10 inch mainlines that connect to manifold and four other mainlines which connect to pressurized irrigation sprinkler systems. South VT motor/pump is 60 HP; north VT motor/pump is 100 HP. A second river pump/diversion system is located nearly 0.5 mi to the east and south of river, and is included as a POD under these same water rights for irrigation of authorized 311.6 acres.

Measuring Device: A McCrometer propeller meter is installed on each of the two 10 inch mainlines between the pump and the manifold. There is adequate straight run of pipe both up and downstream of meter (about 6 ft up and 7 ft down). Both pumps running at time of visit; south pump was reading about 1100 gpm; north meter reading approximately 1500 gpm. Meter installations are good with respect to straight run pipe requirements. McCrometer meters are not on IDWR approved flow meter list but generally acceptable if installed prior to IDWR's adoption of new meter standards and/or issuance of measurement orders.

Conveyance & Irrigation System: As per assistant watermaster, manifold and mainlines from this pump station goes to 1 mainline that crosses the river south to big pivot and corner hand lines; other lines go to north windshield pivot and hand lines to fields north and east of river. Total irrigated area based on digitizing 2015 imagery is approximately 300 to 310 acres. There may be a few acres in north windshield pivot not included within water right place of use description.

Additional Comments: Water right includes 311.6 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 311.6 acres.

1. Rock weir dam in river raises water to cut in north side of river bank to small pond and pump station.

2. White Pumps 68 P1 & P2, 60 HP pump to 10 inch mainline with McCrometer flow meter (south or left of photo) and 100 HP pump to 10 inch mainline and McCrommeter meter (north or right of photo).

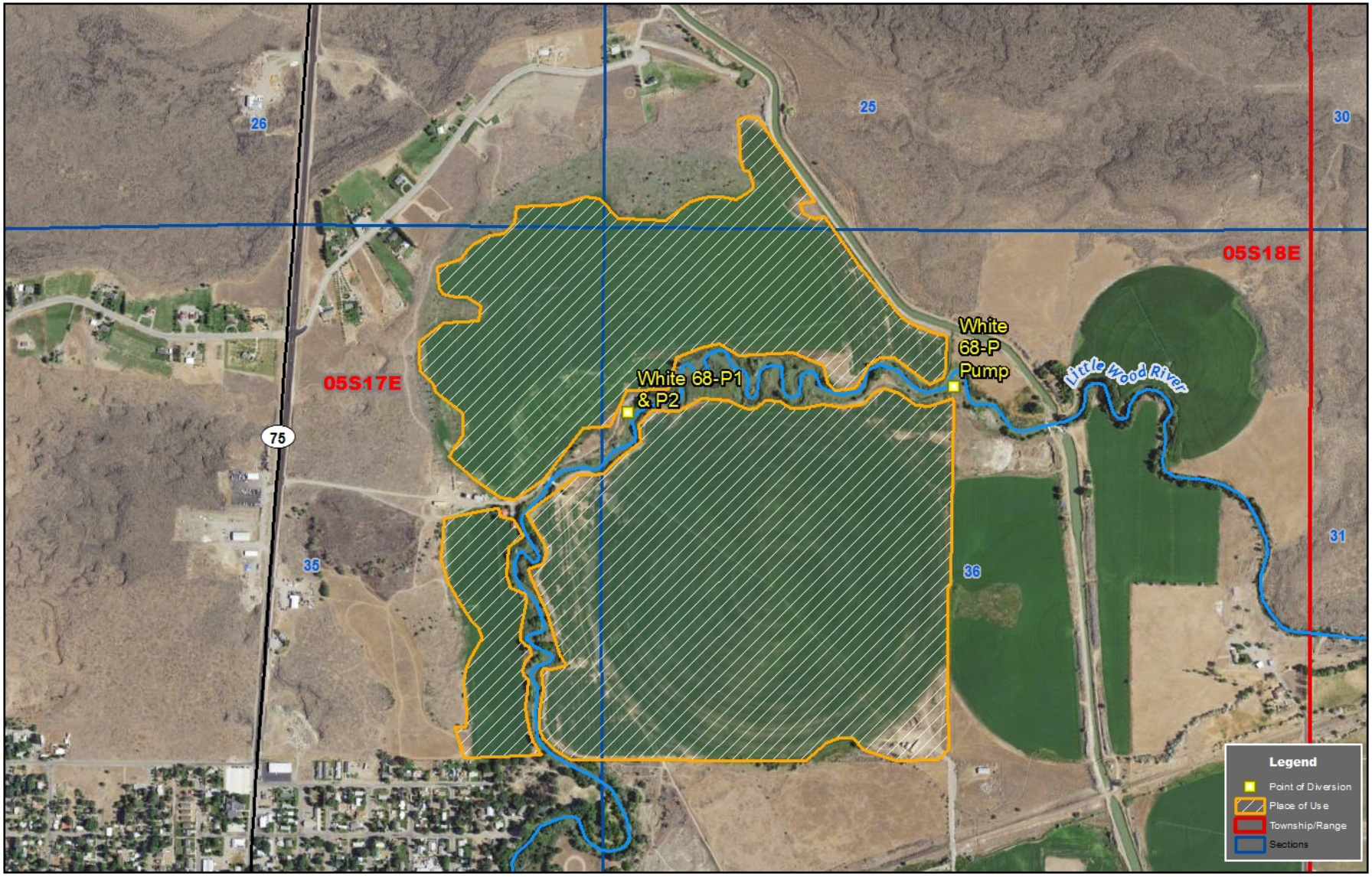
3. White 68 P1 and P2, pumps to mainlines, manifold; 4 lines off of manifold to pressurized sprinkler systems.

Owner: **STENNETT, W CLINTON**

Diversion: **Pumps**

Water Rights: **37-10561A , 37-10561B**

This map depicts the Place of Use for these water rights.



Imagery Credit:
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Date: 8/26/2015

0 0.2 0.4 Miles

State of Idaho
Department of Water Resources

Owner: Stennett, Michelle
Water Right Number(s): 37-10561A (5/5/1884; 4.0 cfs); 37-10561B (5/5/1884; 2.2 cfs)
Diversion Name: White 68-P
Field Visit Date: 07/02/2015
Diversion Location: About 1.7 mile northeast of Shoshone. Diversion and POU located below Milner Gooding Canal.

Combined/Other Water Rights & Sources: Right 37-59K (Big Wood River source and Cottonwood Decree right with 5/1/1899 priority) is combined with 37-10561A & B, but it was not included in the BWLWWUA delivery call. Right 37-59K has an authorized diversion rate of 21.76 from the Big Wood River at the Richfield Canal and a conveyance loss of 5.88 cfs (27%) through Richfield Canal and Jim Byrns Slough so that 15.88 cfs can be re-diverted from the Little Wood River. Use of all three rights is limited to combined total of 311.6 acres. BWLWWUA information response indicates that there are no BWCC-AFRD2 shares overlapping these rights. IDWR staff confirmed no BWCC-AFRD2 shares are associated with this owner and lands described by the rights although the water rights place of use is within the BWCC-AFRD2 boundary.

Diversion Description: Short ditch off south side of river bank directs water to small pond with an intake pipe connected to a CMP type vault and a 40 HP vertical turbine motor and pump that pumps water to a steel 8 inch mainline that tees to two separate 8 inch mainlines, one that crosses the river to the north and one that goes south, both to irrigation sprinkler system discharge points. A second river pump/diversion system is located nearly 0.5 mi to the west and north of river, and is included as a POD under these same water rights for irrigation of authorized 311.6 acres.

Measuring Device: A McCrometer propeller meter is installed on the 8 inch mainline between the pump and where the mainline tees to the north/south lines. There is adequate straight run of pipe both up and downstream of meter (62" up/over 60" down). Pump was running at time of visit; meter reading was approximately 800 gpm. Meter installation is acceptable. McCrometer meters are not on IDWR approved flow meter list but generally acceptable if installed prior to IDWR's adoption of new meter standards and/or issuance of measurement orders.

Conveyance & Irrigation System: Two mainlines split from one mainline off pump, one 8 inch line goes north across river (likely to hand lines east of north pivot - appeared to be alfalfa/hay crop); and one 8 inch line goes south most likely to corner hand line areas (observed alfalfa in corner pivot field near pump). Staff observed three separate leaks in the north-south split mainlines. Total irrigated area based on digitizing 2015 imagery is approximately 300 to 310 acres. There may be a few acres in north windshield pivot (north of river) that are not included within water right place of use description.

Additional Comments: Water right includes 311.6 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 311.6 acres.

1. White Pump 68-P: short ditch in background to pipe intake and pump vault (foreground).

2. White Pump 66-P: 40 HP pump to 8 mainline with McCrometer flow meter, pipe tees to north and south mainlines.

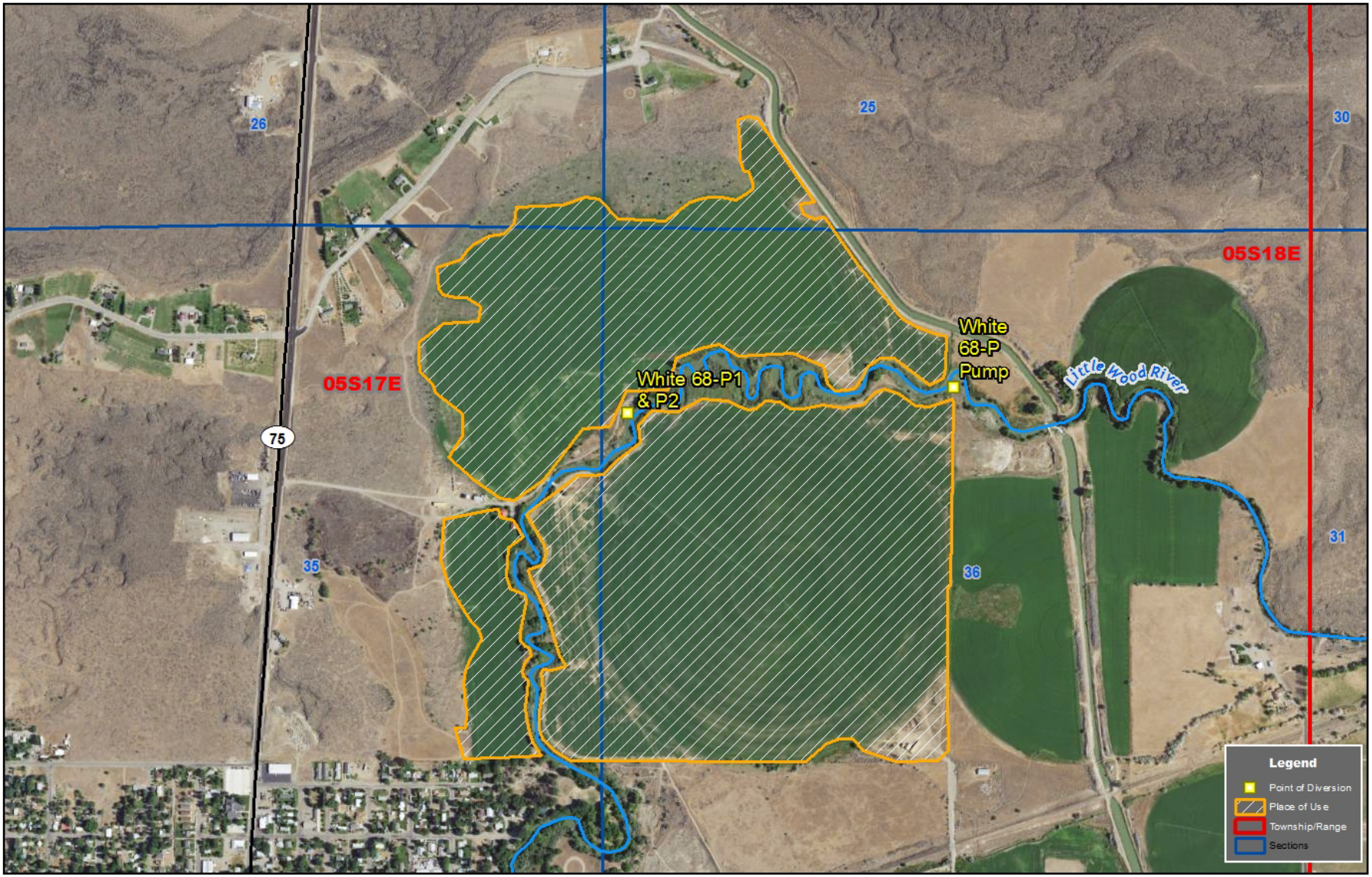
3. White 66-P: north mainline crossing river.

Owner: **STENNETT, W CLINTON**

Diversion: **Pumps**

Water Rights: **37-10561A , 37-10561B**

This map depicts the Place of Use for these water rights.



Imagery Credit:
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Date: 8/26/2015

0 0.2 0.4 Miles

State of Idaho
Department of Water Resources

Owner: Arkoosh, John W.
Water Right Number(s): 37-326 (11/1/1882; 0.4 cfs), 37-328 (4/1/1885; 0.6 cfs), 37-1127 (4/1/1905; 1.6 cfs); and re-diversion for 37-21485 (Big Wood River 'Cottonwood Decree' right, 5/27/1899; 0.13 cfs)
Diversion Name: Winters Pump 80-P
Field Visit Date: 06/26/2015
Diversion Location: About 7.1 miles northeast of Gooding, 0.1 mile north of railroad tracks. POD and POU located below Milner Gooding Canal.

Combined/Other Water Rights & Sources: All three Little Wood River rights include AFRD2 combined use condition (S03) and AFRD2 exchange condition (161). IDWR staff review verified about50 shares of BWCC-AFRD2 water as per BWCC-AFRD2 records, confirming information submitted by BWLWWUA, except there appears to be additional shares under customer/cert 12.

Diversion Description: Pipe intake directly from river to CMP wet well/sump connected to a 50 HP short coupled vertical turbine pump and 10 inch mainline discharge pipe to irrigation system. Some minor pipe leakage was observed around the end of dragon filter.

Measuring Device: A McCrometer propeller flow meter is installed on the 10 inch mainline between pump and dragon filter. The installation is marginal with valves just 60 inches above the meter. Pipe length downstream of meter is good. Meter reading was about 900 gpm at time of visit.

Conveyance & Irrigation System: Pump pressurized water to the 10 inch mainline and dragon filter, with buried mainline off filter to pivots. A 6 inch aluminum mainline comes off dragon filter to hand lines for irrigation of a pivot corner just south of pump (corner did not appear irrigated in 2013 imagery). Owner reported that system includes 3 pivots (1 big wiper pivot and 2 smaller full circle pivots, plus the one corner south of pump. Observed corn crop in two pivots at time of visit (3rd pivot not seen).

Additional Comments: Water right includes 157.3 acres of irrigation use. Actual irrigated acres within water right boundaries were found to be less than 157.3 acres. The POU has had minor changes to the areas irrigated. Approximately11 irrigated acres were found to be outside current water right boundaries; about 4 of these 11 acres were outside the BWCC-AFRD2 boundary. A transfer may need to be filed. Data based on 2013/2015 NAIP imagery and Landsat imagery for June/July 2015.

1. Winters 80-P pump: CMP wet well/sump with 50 HP pump to 10 inch mainline with flow meter.

2. Winters 80-P pump: pump and river is in background, dragon filter with 6 inch aluminum mainline off filter going to corner area. Mainline to pivots comes off bottom of filter (buried)

Owner: **ARKOOSH, JOHN W**

Water Rights: **37-1127, 37-21485, 37-326, 37-328**

Diversion: **Richfield Canal, Jim Byrns Slough**

This map depicts the Place of Use for these water rights.

Imagery Credit:
The aerial image displayed in this map is from the 2013 National Agriculture Imagery Program (NAIP).

Date: 8/26/2015

0 0.125 0.25 Miles

State of Idaho
Department of Water Resources