

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
**BENEFICIAL USE FIELD REPORT**

**A. GENERAL INFORMATION**

**Permit No:** 92-11089  
**Exam Date:** 04/24/2025

## 1. Current Owner:

JUSTIN MURPHY 807 N FORK SANTA CREEK RD SAINT MARIES ID 83861-9541 AND/OR  
CRISSA MURPHY 807 N FORK SANTA CREEK RD SAINT MARIES ID 83861-9541

## 2. Accompanied by: Crissa Murphy

Phone No: 208-582-0437

Address: Same as above

Relationship to permit Holder: Permit Holder

3. **SOURCE:**

UNNAMED STREAM

**Tributary**

SANTA CREEK

**Method of Determination:** ArcMap and DRG layer.**B. OVERLAP REVIEW**

## 1. Other water rights with the same place of use:

YES Overlap

| Water Right No. | Source                    | Purpose of Use | Basis   |
|-----------------|---------------------------|----------------|---------|
| 92-7088         | SPRING tributary of SINKS | DOMESTIC       | LICENSE |

Comments: Licensed Right 92-7088 authorizes domestic use in the amount of 0.02 cfs / 1.2 afa from a Spring source tributary of Sinks. The domestic POU was assigned as a generic 40-acre tract at time of license issuance. Backfile maps vaguely illustrate the beneficial use occurring on a parcel to the south of this Permit's parcel & POU. Due to 92-7088's domestic not being appurtenant to Permit 92-11089's POU nor parcel and there is no concern for overlap between WRs.

## 2. Other water rights with the same point-of-diversion:

NO Overlap**C. DIVERSION AND DELIVERY SYSTEM**1. **LOCATION OF POINT(S) OF DIVERSION:**

UNNAMED STREAM SW¼ NW¼, Sec. 25, Twp 44N, Rge 03W, B.M. BENEWAH County

UNNAMED STREAM SW¼ NW¼, Sec. 25, Twp 44N, Rge 03W, B.M. BENEWAH County

Method of Determination: GPS; Western POD is a collecting pool in stream located at -116°40.00855, 47°7.9784 and Eastern POD is a collection pool in-stream located at -116°40.0046, 47°7.9755.

**PLACE OF USE: IRRIGATION**

| Twp | Rng | Sec | NE |    |    |    | NW |    |     |    | SW |    |    |    | SE |    |    |    | Totals |
|-----|-----|-----|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|----|--------|
|     |     |     | NE | NW | SW | SE | NE | NW | SW  | SE | NE | NW | SW | SE | NE | NW | SW | SE |        |
| 44N | 03W | 25  |    |    |    |    |    |    | 0.1 |    |    |    |    |    |    |    |    |    | 0.1    |

Total Acres: 0.1

**PLACE OF USE: STOCKWATER and DOMESTIC**

| Twp | Rng | Sec | NE |    |    |    | NW |    |    |    | SW |    |    |    | SE |    |    |    | Totals |
|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------|
|     |     |     | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE |        |
| 44N | 03W | 25  |    |    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |        |

Method of Determination: Beneficial use field exam and ArcMap aerial imagery.

- 3.
- ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- ☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☒ Photo of Diversion and System Attached

4.

| Well or Diversion ID No.* | Motor Make | Hp | Motor Serial No. | Pump Make                                 | Pump Serial No. or Discharge Size                                 |
|---------------------------|------------|----|------------------|-------------------------------------------|-------------------------------------------------------------------|
| UNNAMED STREAM (WESTERN)  |            |    |                  | YOUNG TREE – 12V/DC BATTERY OPERATED PUMP | MODEL: T33-12V<br>3.5 GPM 1/2 -INCH FLEX TUBING TO PORTABLE TANK. |
| UNNAMED STREAM (EASTERN)  |            |    |                  | YOUNG TREE – 12V/DC BATTERY OPERATED PUMP | MODEL: T33-12V<br>3.5 GPM 1/2 -INCH FLEX TUBING TO PORTABLE TANK. |

#### D. FLOW MEASUREMENTS

1.

| Measurement Equipment | Type | Make | Model No. | Serial No. | Size | Calib. Date |
|-----------------------|------|------|-----------|------------|------|-------------|
| NONE                  |      |      |           |            |      |             |

2. Measurements: In accordance with IDAPA 37.03.02 Beneficial Use Examination Rules, Section 035.01.q.iii, a direct measurement is not required if the extent of beneficial use and POD can be confirmed by assorted other means. Pump capacity was evaluated during the exam which demonstrated the small 12-Volt DC pump has a pump capacity of 3.5 gpm, which rounds to 0.01 cfs considering Department rounding standards.

#### E. FLOW CALCULATIONS

Measured Method: Pump manufacturer data plate information specifies a 3.5 gpm flow capacity.

- Permit authorized diversion rate(s): 0.03 cfs for irrigation based on 1.0 acres, 0.02 cfs for stockwater use, and 0.06 cfs for domestic use 2 homes.
- Beneficial use field exam evaluated a portable trailer mounted tank filled by 12-Volt Young Tree brand Model T22-12V pump with 3.5 gpm pump capacity.
- License recommendation: 0.01 cfs for Domestic beneficial use, which equals 4.5 gpm; pump capacity rounded up to nearest CFS authorized rate eligible for license approval. 0.01 cfs is recommended for the Irrigation beneficial use and Stockwater beneficial use respectively.
  - The maximum diversion volume is recommended at **0.01 cfs**. Each beneficial use's diversion rate has been reduced from their permit approved value with the diverting pump used within the Permit's development period being the limiting factor toward license recommendations.

## F. VOLUME CALCULATIONS

### 1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.1 \text{ acres irrigation} \times 3.0 \text{ afa} = 0.3 \text{ af}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.01 \text{ cfs} \times 214 \text{ days} \times 1.9835 = 4.2 \text{ af}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = N/A$$

- Irrigation is from a surface water stream source; IDAPA 37.03.02 – Beneficial Use Examination Rules, Section 035 prescribe that "Irrigation using Natural stream flow diverted from a stream or spring" are exempt from volume reporting requirements. There will be no annual volume for irrigation on the face of the license, rather volume requirements shall be detailed in Conditions of Approval for the irrigation beneficial use.

2. Volume Calculations for Other Uses: the 0.01 cfs diversion rate if pump is operated 24/7 year round is capable of diverting a total volume of 7.2 af. If water were available in the intermittent stream for half the year the volume would reduce to 3.6 af eligible for allocation. This information indicates sufficient water is available during parts of the year to satisfy license recommendations for domestic and stockwater using Department standard allowances as follows:

- Domestic (in-home only) annual volume = **0.6 af** for 1 home (consists of a small RV and small cabin which equate to 1 home for water use calculations).
- Stockwater annual volume =  $[(10 \text{ goats} \times 2 \text{ gpd}) + (10 \text{ hogs} \times 4 \text{ gpd})] \times 365 \text{ days} = 21,900 \text{ gal} / 235,850 \text{ gal per af} = 0.07 \text{ af} = \mathbf{0.1 \text{ af}}$  considering Department rounding standards.

There will not be a maximum diversion volume assigned to the face of the license due to the exempt volume reporting status for the irrigation beneficial use. The domestic and stockwater beneficial uses shall have an annual volume reported on the face of the license.

## G. NARRATIVE/REMARKS/COMMENTS

I conducted a beneficial use field exam for 92-11097 & 92-11089 on 4/24/2025 with the Permit Holder, Crissa Murphy, which showed water being diverted for domestic, stockwater, and irrigation uses. The water system developed under Permit 92-11087 diverts from two separate locations from Unnamed (intermittent) Stream sources. Both PODs are lower in stream(s) reach than those associated with 92-11097. Diverting works incorporate a portable 4-wheeler mounted 50-gal tank with 12-volt 3.5 gpm pump; once filled the tank is transported to a shared 2,500 gallon rotomolded storage reservoir which is used by the Permit Holders with the water system infrastructure for Permit 92-11097. I have recommended **0.01 cfs** as the beneficial use diversion rate for each of the three water uses on the Permit based on the 3.5 gpm diverting pump observed at time of exam. Diversion rate recommendations are detailed above under Flow Calculations.

The western POD is a small catch basin cut to intercept unnamed stream flow at a bend in road cut, with pump and intake pipe dropped from the 4-wheeler trail to fill the transport tank. The eastern POD had been developed similarly in a segment of the stream that runs in a road cut ditch from which water is pumped into the transport tank. I've recommended licensing based on how the system was operated throughout the Permit's development period. While both Permit(s) 92-11089 & 92-11097 use a shared 2,500-gal storage reservoir as part of their distribution system, the PODs are separate between the two permits.

During the field exam I walked the property with Mrs. Murphy using field maps to sketch the location of POD(s) and POU(s) and cataloged numerous photographs to illustrate the water system developed under the Permit. The water conveyance system uses the 50-gallon drum transported by trailer from each POD to a central 2,500-gal storage tank with dedicated poly-pipe routed to a flexible fire hose attachment that is used to fill IBC 275-gal tanks that are transported from the storage tank area to the POU(s).

The domestic POU consists of a small RV and small wooden cabin with similar footprints. Based on the nature of the off-grid development I've combined both to reflect 1 household following my field exam. During licensing review, I used ArcMap aerial imagery to assign the Domestic POU, which is the same as the Stockwater and Irrigation POU for illustration purposes. I've recommended **0.6 af** for in-home domestic use for licensing purposes. During dry years when the intermittent stream dries up earlier in the season the Permit Holders have relied on trucking water into the homesite; this supports the seasonal nature of the stream but there should be adequate water to divert the 0.6 af throughout the course of the year from the Unnamed Stream source.

The stockwater POU consists of multiple small stock pens with portable water troughs that serve 10 goats and 10 hogs, and a couple of turkeys and chickens. I evaluated annual volume based on the 10 goats and 10 hogs, which resulted in 0.07 af that I rounded up to the 0.1 af allowance. I didn't count head of chickens nor turkeys during the exam but the water usage for avian stock animals is satisfied in the 0.03 af of rounding to reach the **0.1 af** recommended for licensing. In addition to the Unnamed Stream use, rain barrels are in place to capture any seasonal rainfall of stock pen roofs.

The irrigation POU is part of the off-grid home site compound and is a collection of potted plants, orchard tree starts, and small greenhouse grow rooms. Water is distributed from the portable tanks to 275-gal IBC totes which then route by small PVC pipe to soaker hose lines within the greenhouses for garden growing, or to garden hoses for watering of plants and trees. Based on the finite amount of water available from the stream source little water is wasted, and any grassy areas are a result of natural sub-irrigation and not active irrigation practices. I evaluated a small space equaling 0.1 acres in size that compiles all the assorted water practices found during the exam. The annual volume authorized for 0.1 acres equals **0.3 af**, which is described under Conditions of Approval on the license recommendation based on small size irrigation acreage allowances. ArcMap aerial imagery was used to assign both irrigation and stockwater POU shapes during licensing review which are both part of the domestic homesite compound.

During licensing review, I removed condition 26A and X02 based on compliance by the Permit Holder and condition description requirements. The intake pipe has a screen to prevent debris which satisfies the ¼ inch fish screen requirement, but the streams do not appear to be fish bearing; I've maintained the condition for licensing purposes. I revised condition 132 to reduce from 2 to 1 home based on field exam observations of development under the permit. I replaced condition R66 with condition X31 based on reduction of irrigation acreage from 1.0 acres to 0.1 acres evaluated during the exam. All other conditions on the Permit shall be carried forward to licensing. There is no overlapping water right concerns toward licensing 92-11089.

Have conditions of permit approval been met?   X   Yes        No

## H. RECOMMENDATIONS

### 1. Recommended Amounts

| <u>Beneficial Use</u> | <u>Period of Use</u> | <u>Rate of Diversion</u> | <u>Annual Volume</u> |
|-----------------------|----------------------|--------------------------|----------------------|
| IRRIGATION            | 04/01 to 10/31       | 0.01 CFS                 |                      |
| STOCKWATER            | 01/01 to 12/31       | 0.01 CFS                 | 0.1 AF               |
| DOMESTIC              | 01/01 to 12/31       | 0.01 CFS                 | 0.6 AF               |

**Totals:** 0.01 CFS

**2. Recommended Amendments**

☐ Change P.D. as reflected above    ☐ Add P.D. as reflected above    ☒ None

☐ Change P.U. as reflected above    ☐ Add P.U. as reflected above    ☒ None

**I. AUTHENTICATION**

Luke Bates – Sr Water Resource Agent

Field Examiner's Name  Date 12/11/2025

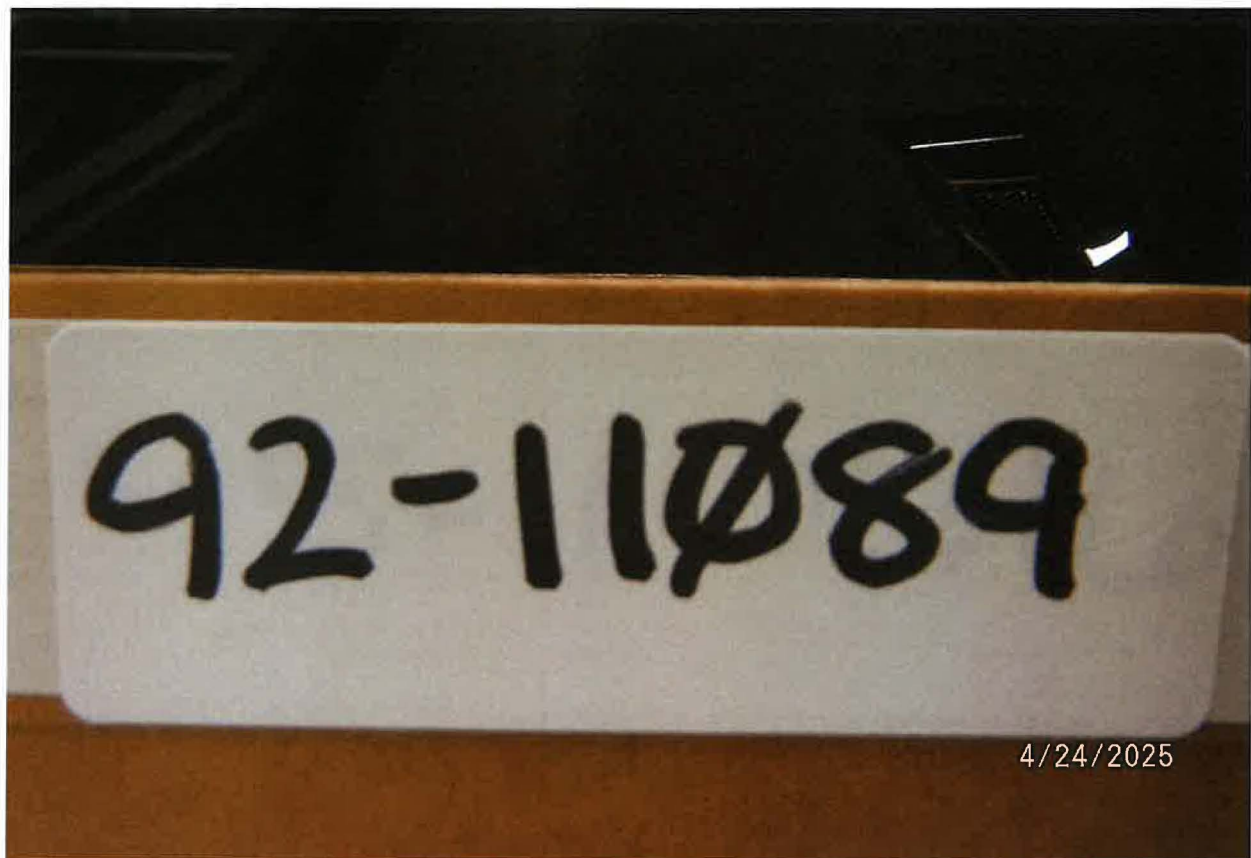
Reviewer Michelle Richman Date 8/7/2026

State of Idaho  
Department of Water Resources  
**Attachment to Field Exam**  
92-11089

This map depicts the DOMESTIC, STOCKWATER, and IRRIGATION system diagram.



- Travel Route for Portable Tank Filled on Trailer to POU
- Place Of Use Boundary
- Point of Diversion
- Townships
- PLS Sections
- Quarter Quarters



BENEFICIAL USE FIELD EXAM DATE 4/24/2025



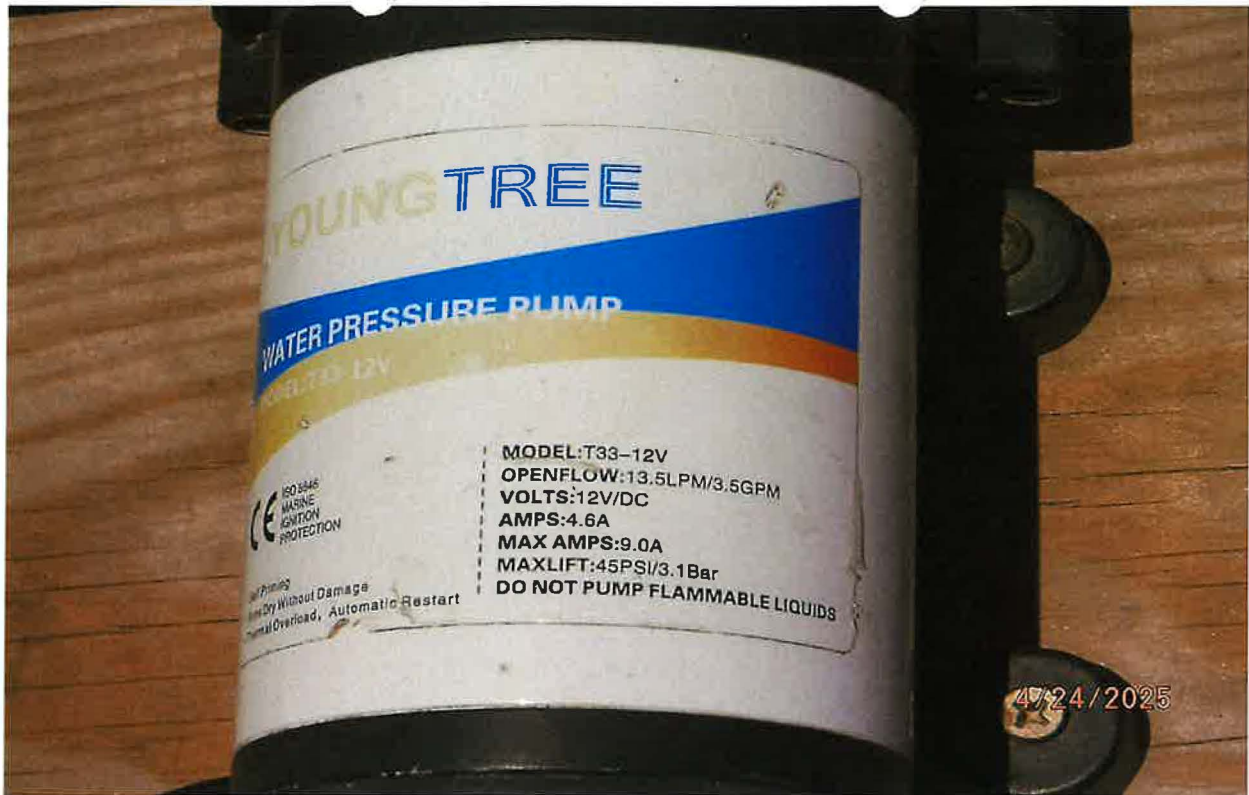
POD – WESTERN MOST POD, SMALL COLLECTION POOL DUG OUT TEMPORARILY CAPTURING STREAM WATER WHICH IS PUMPED TO STORAGE TANKS



POD – EASTERN MOST POD, SMALL COLLECTION POOL DUG OUT TEMPORARILY CAPTURING STREAM WATER WHICH IS PUMPED TO STORAGE TANKS



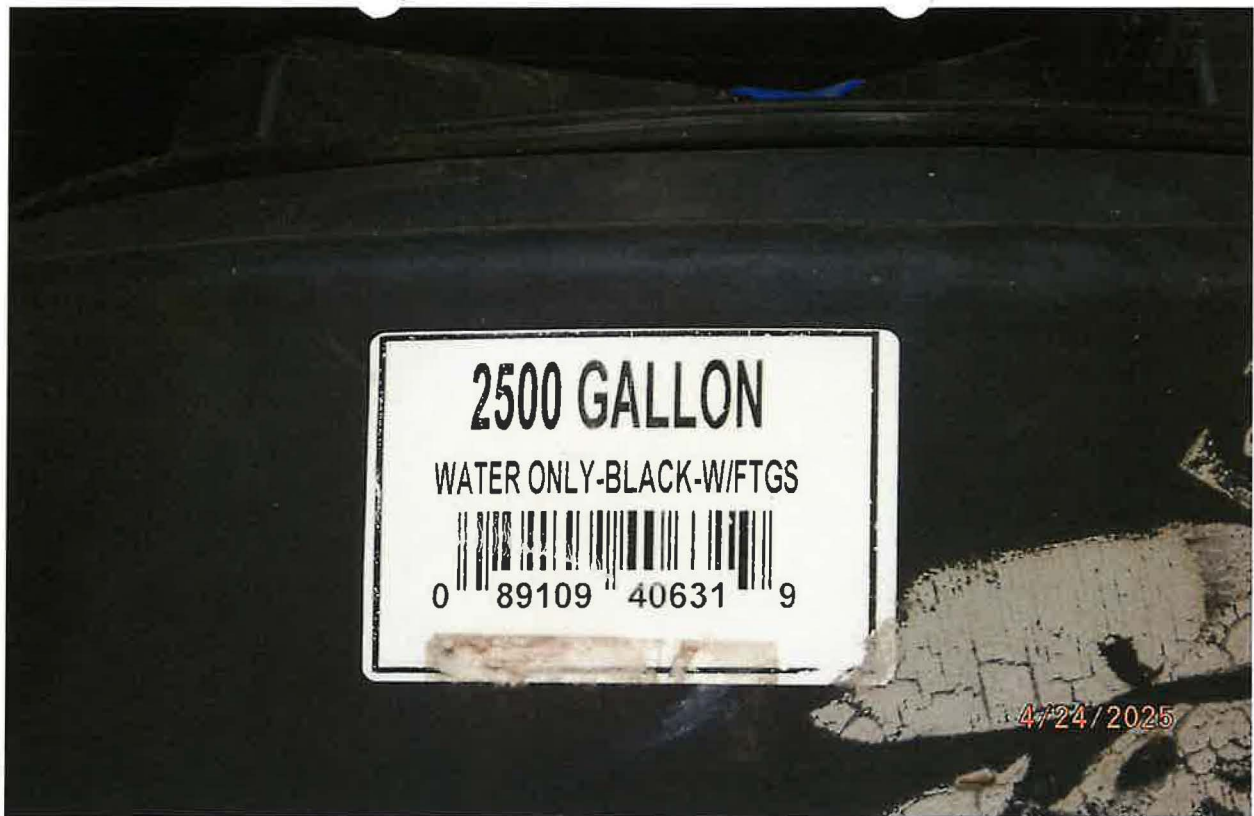
DIVERTING PUMP – PORTABLE 12V/DC WITH BATTERY MOUNTED ON TRAILER



DIVERTING WORKS – 12V/DC 3.5 GPM PUMP ATTACHED TO 4-WHEELER TRAILER  
USED TO DIVERT UNNAMED STREAM WATER FROM COLLECTION POOLS



PORTABLE COLLECTION TANK USED TO TRANSFER STREAM WATER TO STORAGE  
TANK(S)



2,500-GAL STORAGE RESERVOIR SERVES WATER USE FOR WATER RIGHTS 92-11089AND 92-11097





CONVEYANCE SYSTEM – OVERLAND PIPE ROUTED FROM STORAGE RESERVOIR TO  
FILL POINT



WATER FILL STATION FROM 2,500-GAL STORAGE TANK – PORTABLE TANKS  
FILLED FOR USE AT OFF-GRID RESIDENCE(S); CO-LOCATED WITH EASTERN MOST  
COLLECTION POOL



DOMESTIC POU – SMALL CABIN STRUCTURE AND RV



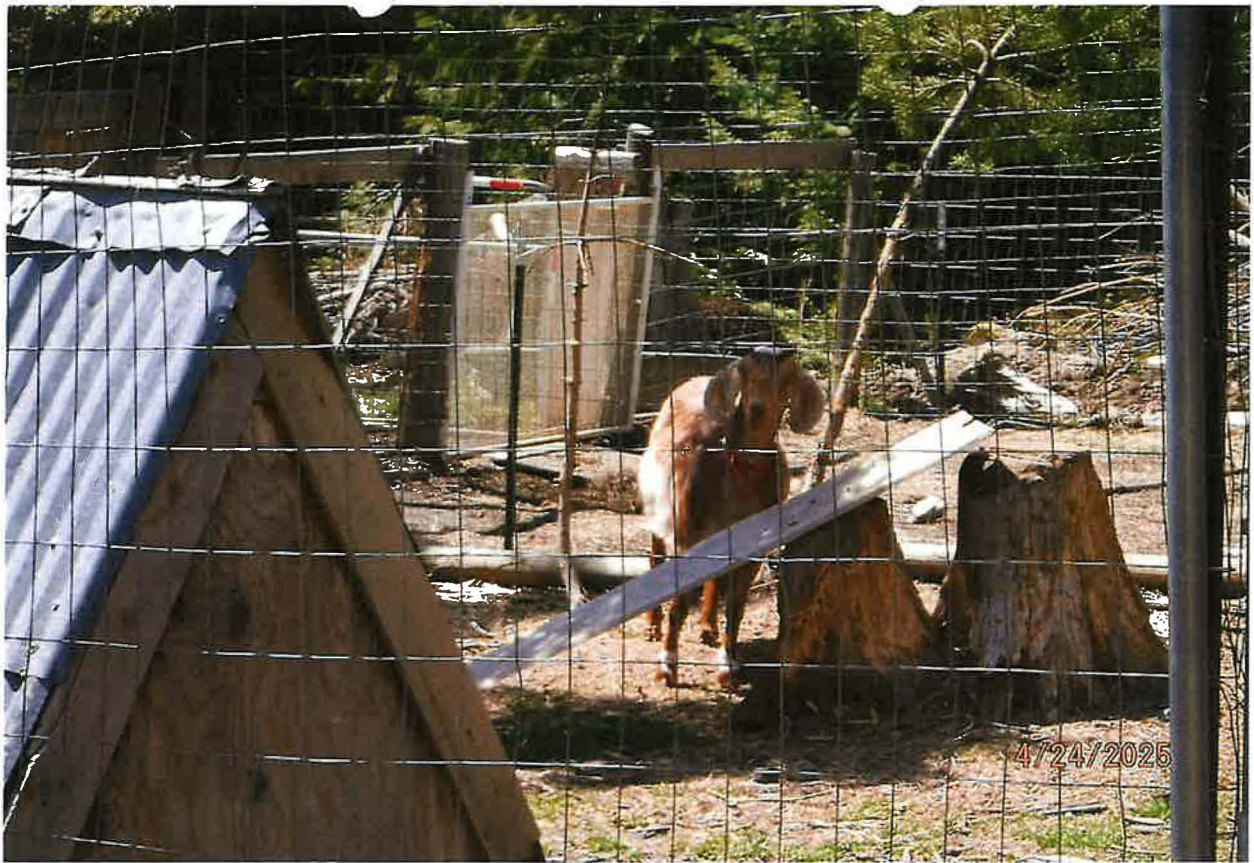
IRRIGATION POU – SMALL GREENHOUSE AND POTTED PLANTS AROUND  
RESIDENCE



IRRIGATION OCCURING IN GREENHOUSE WITH DEDICATED HOSE CONNECTION



STOCKWATER POU – SEVERAL FENCED PENS FOR SMALL SIZE STOCK



STOCKWATER POU – GOAT PEN





STOCKWATER POU – FENCED CHICKEN COUP & YARD



MULTIPLE IBC CONTAINERS USED THROUGHOUT HOMESTEAD FILLED FROM  
2,500-GALLON STORAGE TANK