

DATE: July 10, 2007
TO: LAS 13742 File
FROM: Wendy Tatlow, Natural Resource Specialist II
RE: Field Inspection, proposed creek water withdrawal, Pitchfork Ranch, Lazy Mountain, Palmer, Alaska.

Arrival Time: 1:30 p.m.

Water Resources Personnel: Michael Walton, Natural Resource Specialist II
Wendy Tatlow, Natural Resource Specialist II

Unnamed Stream: Flow Rate = 0.12 CFS = 77,558 gpd

Mr. Todd Pettit, Ranch Manager, met DNR Staff at the main farm house. We then followed Mr. Pettit up the valley to the pasture in question within MSB Tax ID No. 18N02E13C004. This pasture is the home of a herd of bison and elk. For safety purposes we transferred to a truck driven by Mr. Pettit's uncle to cross this pasture. We drove up hill through the pasture; several wetland seep areas were visible as we went up hill. There had been some effort put to channeling the water from these seeps down to a small pond near the base of the pasture. Continuing up hill we came to the top of the pasture where we parked. Mr. Pettit pointed out the location of the property corner, outside the fence, across the creek, and up hill further. There was not a pipeline in place at the time of the site visit. No remnants of the previous pipeline were visible during this site visit. A forest fire went through the area in 1999.

We then went to a gate approximately 150 feet from where we parked and went through to look at the creek. We walked on a trail around a bend in the creek and up to a point where the creek leaves a swampy area on the adjacent property in Section 24. We then went back downstream onto Pitchfork Ranch property and found an adequate location to take a flow reading, Photo 1.

We then crossed the creek and walked to the survey marker. This survey marker designates the South Center ¼ Section point between Section 13 and Section 24. From Photos 2, 3, & 4, Pitchfork Ranch fencing is well within the property boundary. As well, these photos also show that the creek does flow within Pitchfork Ranch Lands and may be accessed as a water source.

We then discussed the options for withdrawing water from the creek. Mr. Pettit stated that they had considered constructing a small impoundment structure and creating a pond

at the narrowest section. I asked him how tall this structure would be. Mr. Pettit was not sure how tall the impoundment would be. I then told him about the Alaska Dam Safety program and let him know that he may want to review these regulations or contact Charlie Cobb, Dam Safety Engineer, prior to constructing any impoundment structure. I suggested he consider an infiltration gallery and described the structure. I also pointed out an area of the creek where much of the water seemed to be underground in sub-flow, pointing out the area where the water was coming back to the surface as a good place to install an infiltration gallery. We also discussed using gravity feed, laying a line in the creek bed then directing the line up and over the knoll and down into the pasture.

Mr. Pettit also asked about using the springs/seeps along the hill front as a water source. I told him that this was a viable option; using infiltration galleries or some type of collection trench would work to collect the water and direct it down to the pond at the base of the pasture. I informed Mr. Pettit that using these seeps as a water source would require an additional water right application.

Photographs taken during the field inspection are attached. Photographers were both Michael Walton and Wendy Tatlow.

Attachments

Photo 1

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Pitchfork Ranch

Small Stream, Location of Flow Measurement



Photo 2

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Pitchfork Ranch

Location of corner survey marker. Fence does not follow property line.

Creek

Survey Marker



Photo 3
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Survey Marker



Photo 4

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Close up of Survey Marker

