

Well B 50gpm Upgrade

Pump Upgrade	\$	7,600.00
3 Phase Converter	\$	5,000.00
Tough Shed	\$	2,500.00
Electrical Relocation to Shed and Well	\$	7,000.00

Well 4 Refurbishment

Metal Building	\$	40,000.00
Permiting	\$	500.00
Booster Pumps	\$	38,000.00
10,000 Gallon Tank	\$	10,000.00
Pipping	\$	5,000.00
Electrical	\$	25,000.00
Project Total	\$	140,600.00

Water Distribution and Development Plan

The proposed changes & upgrades to the Ranch's Water Distribution System are recommended to maximize the Existing Well pumping capacities, storage capacities & Permitted Water Rights, which total 83.5 AFA

As of date Combined Well production levels are Estimated at 119 gpm

Combined Storage Capacity is 40,000 gallons

Reminder:

When calculating usage, the Ranch does not operate it's Well Fields 24/7 and the irrigation season is approx. 8 mths of the year

Development Plan

Phase 1

This is required to meet Existing Demand

Add a 6" pipeline from Well 4, B & K storage tanks (15000 gallons) to RC.

This will increase pumping capacity to RC & MII Reservoir without the initial need to replace existing pump skid at Wells 4, B & K

Downsize the Well Pump at Well 6 from 75gpm to a 30gpm Pump, connect via 4" pipeline to the Dakota storage tank (10,000 gallons) & pump skid

Downsizing the Well Pump is necessary due to the decreased pumping levels at Well 6

Connecting Well 6 to Dakota storage & pumps will increase the Ranch's storage capacity to 50,000 gallons.

Estimated Cost for Phase 1 is \$36,966.13- Revised cost now 27,678.91

This does not include trenching, which will be performed with Ranch equipment & personnel or legal/administrative fees

Phase 2

This is required to meet 50% of permitted allotment under Permit E-7871

It will be necessary to have the **infrastructure** completed by **Nov 1 2015** to meet Beneficial Use requirements, under the Settlement Agreement for E-7871

There will be a need for Administrative changes to Well B's Permit

Increasing pumping capacity of Well B to 50gpm, this will give a combined Well capacity of 150 gpm

Increase storage capacity with a new 10,000 gallon tank.

New Well Controller, pump skid and power upgrade to deliver water to RC, MII, I.V. Lodge, Log Cabin & Ranch related uses

New storage Facility to house pump skids, storage & power. Similar to the Metal Shed located at Dakota Well.

Breakout ground & irrigate under Permitted conditions for E-7871

Estimated Cost for Phase 2, TBA

This does not include Hydrology, Legal or Administrative Fees.

Phase 3

The Principle has elected to proceed with applying for the full 68 afa, under permit E-7871.

Additional ground will need to be irrigated to achieve the 68 afa.

A New Well ~~maybe~~ required to replace the existing E-7871 Dakota Well

There will be Administrative and Hydrology costs involved

The Estimated cost for Phase 3, TBA