

Platte River Recovery Implementation Program
Cook Tract Well Recapture Operating Parameters
DRAFT 09/06/16

Introduction: The Platte River Recovery Implementation Program (Program) constructed a well on the Program's Cook tract with a discharge pipeline into the North Phelps County Drain Ditch that discharges to the Platte River. The purpose of the well is to pump portions of the Program's share of water recharged in the Phelps County Canal. This integrated project is designed to augment streamflows in the Platte River near Overton. The following operating parameters will be utilized by the Program for well operations in 2016. These proposed operating parameters may be revised in the future after pilot operations are evaluated. The well permit was approved by the Tri-Basin Natural Resources District (TBNRD) in 2015 as permit #TBDW-1500. The pump installed in the well is an 800 gallons per minute (gpm) pump.

1. The recapture well will be turned on if:
 - A. The timeframe is March 1st through November 30th, and
 - B. Platte River at Grand Island gaged streamflows are below U.S. Fish and Wildlife Service (USFWS) target flows for more than 72 hours, and
 - C. The Program has sufficient Phelps County Canal groundwater recharge accretions to have a net benefit to the river from pumping.
 - Intermittent operation (such as 12 hours on/12 hours off) may be used if it is found that the well is unable to sustain continuous pumping at 800 gpm. For example, such a condition might arise as a result of a protracted dry period that causes regional groundwater levels to drop. Intermittent operation may also be employed if water levels in the adjacent observation wells exhibit a continuous decline that might indicate a significant dewatering condition related to the well.
 - The Executive Director's Office will coordinate with the USFWS to confirm there are appropriate conditions to initiate well pumping operations each season.
2. The recapture well will be turned off (or remain off) if:
 - A. The timeframe is between December 1st and last day of February.
 - B. Platte River at Grand Island gaged streamflows are above USFWS target flow levels for more than 72 hours.
 - C. The addition of 800 gpm of pumped flows will create flooding, ice jams or structural issues in the drain. If air temperatures are forecast to remain below 28°F for at least 3 days, the drain will be monitored for icing.
 - D. The well has reached a pumping volume where additional pumping no longer provides a score (as determined using water accounting of actual operations of recharge and pumping).
 - E. The drain ditch becomes dry in the vicinity of the well during an extended period of pumping and/or the groundwater temperatures in the monitoring well #1 (between the production well and the drain) deviate significantly from pre-pumping temperatures, indicating potential drawdown in the drain.
 - F. The Executive Director's Office reasonably believes that the pump operation will result in damage to the pump or harm properties or structures.