



MUNICIPAL

## CUTTER PUMPS

### The Site

Package Lift Station, Caldwell, ID

### The Problem

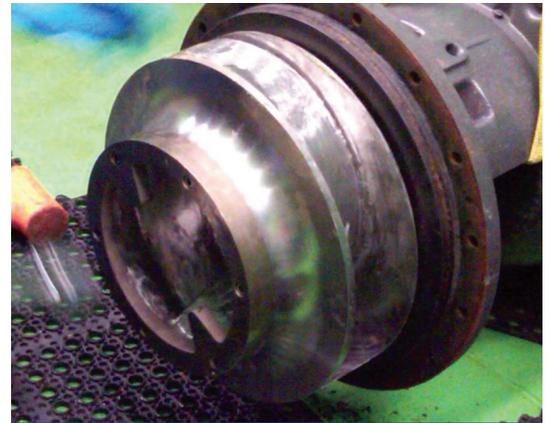
Three Cornell Model 6NHTB's had been installed and working at the site since 2007. The original operating conditions were 1800 GPM @ 97' TDH for each pump, at 1200 RPM. The station had been experiencing flow interrupting blockages one to two times per week, caused by excessive amounts of undigestible, non-comminuted solids in the collection system. Each blockage required extra labor to clean the pumps and reductions in flow resulting in extended run times. Of the three pumps installed, the third pump in the trench-type wet well was experiencing virtually all of the solids handling problems.

### The Solution

Cornell Pump Company installed a Cutter modification to the 6NHTB in Pump #3. The modification was done in the field and involved the installation of a new impeller with rotating cutter ring, stationary cutter assembly, and modified suction cover. The entire conversion took less than 6 hours.

### End Results

Since the installation of the Cutter components, not a single service interruption or pump clean-out episode has been reported. Additionally, the modification was done without a change in motor HP and a minimal impact on pump efficiency. The Cutter modification allows the use of the original, enclosed impeller design, allowing the site to continue operating as designed.



IMPELLER WITH ATTACHED  
ROTARY CUTTER



SUCTION COVER WITH  
OUTFITTED STATIONARY COVER

