

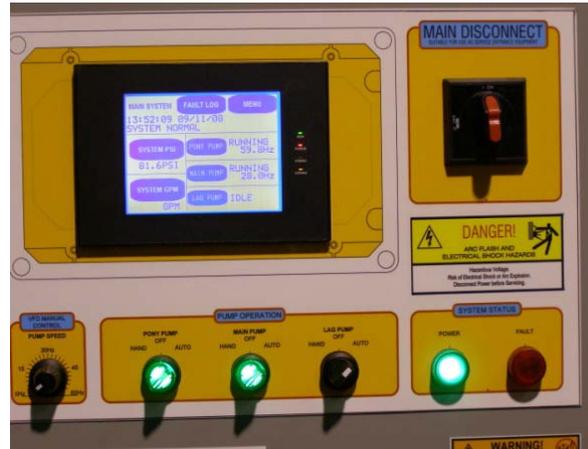
# Pumping Plant –Variable Frequency Drive

Conservation Practice Fact Sheet

533 WA-FS

Natural Resources Conservation Service, Washington

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## Definition

A variable frequency drive (VFD) is a system for controlling the rotation speed of a motor by controlling the amount of electricity delivered to the motor by monitoring and maintaining the pressure and/or flow rate from the pump.

## Purposes

A Pumping Plant with a Variable Frequency Drive (VFD) can be used for a number of purposes including:

- Soft start for the motor
- Adjust flow or pressure to preset level
- Energy efficiency
- Improve air quality

## Where used

The VFD can be used where a pumping plant is used to pressurize and transfer water to maintain water levels in soils, wetlands, or reservoirs, transfer wastewater, remove surface runoff or groundwater.

## Resource Management System

Practices may include irrigation system sprinkler (442), micro (441), Drainage water management (554), Pipeline (516), Irrigation Water Conveyance (430), Waste Transfer (634) and other practices where one or more of the purposes for pumping plant may be needed.