Pumping Plant (533)

A pumping plant is a facility that delivers water at a designed pressure and flow rate to meet a conservation need. Components of the facility include the required pump, associated power unit, plumbing, and necessary appurtenances. It also may include on-site fuel or energy sources and protective structures.

Practice Information

A pumping plant may be installed for a wide variety of conservation purposes. This includes, but is not limited to, delivery of water for irrigation or livestock water, maintenance of critical water levels in wetland sites, transfer of wastewater for utilization as part of a waste management system, and facilitation of drainage by removal of surface runoff or groundwater.

The power supply for a pumping plant may come from line power, fossil fuel, photovoltaic panels, windmills, or water-powered pumps (hydraulic rams). To improve air quality, new or replacement pumping plants will use non-combustion power sources or technologies that are more efficient in fuel use or fuel type.

When planning the installation of a pumping plant, consideration must be given to the potential effects on ground and surface water from water removal or delivery. Other things to consider include ways to protect the pumping plant from freezing, flooding, vandalism, and other events.

This practice has a minimum expected life of 15 years. Operation requirements for the facility will depend upon the type of system chosen by the operator. Maintenance will include routine testing and inspection of the components, removal of debris, protection against freezing, and periodic inspection of safety features.

Common Associated Practices

Pumping Plant (533) is commonly applied with conservation practices, such as Water Well (642), Waste Transfer (634), or Drainage Water Management (554).

For further information, contact your local NRCS field office.