

# Underground Outlet

## PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 620



### DEFINITION

An Underground Outlet (UGO) is a conduit installed beneath the surface of the ground to convey runoff to a suitable outlet.

### PRACTICE INFORMATION

The purpose of the UGO is to carry excess water to a suitable outlet from terraces, water and sediment control basins, diversions, waterways, subsurface drains, surface drains or other similar practices without causing damage by erosion or flooding.

An underground outlet can be installed when surface outlets are impractical because of stability problems, climatic conditions, land use, farmability, or equipment traffic. A UGO can be used as the only outlet for a structure or practice or it may be used in combination with other types of outlets.

The conduit for a UGO can be either solid or perforated pipe depending the site specific design. The inlet to a UGO can be constructed of many

different types of materials but the most common are heavy duty perforated plastic risers. The outlet of a UGO should have either a 10 foot section of solid heavy duty pipe or headwall. The UGO must outlet into stable watercourse that is protected from erosion caused by flows from the UGO.

Both the inlet and outlet of a UGO should be protected from the entry of small animals. The outlet animal guard should be installed so that it does not impede the flow from the UGO.

UGOs can provide a direct conduit to receiving waters for contaminated runoff from crop land. UGOs and the accompanying structure or practice should be installed as part of resource management plan that addresses issues such as nutrient and pest management, residue management and filter areas.

Additional information including design criteria and specifications are in the local NRCS Field Office Technical Guide.

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