

GUIDANCE FOR DETERMINING UNDERTAKINGS INVOLVING THE INSTALLATION OF CONSERVATION PRACTICES

An “undertaking” is any project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval. The following is a detailed explanation of the three undertaking classification categories and their effect on cultural resources:

A. Conservation practices considered as undertakings – GROUND DISTURBING (G)

- a. Some conservation practices have a high potential to affect cultural resources when installed according to standard NRCS criteria. Practices which are primarily structural and involve excavation, grading, shaping, and other ground disturbance beyond normal farming activities are likely to affect cultural resources if present. Such practices are considered undertakings.

B. Conservation practices considered as undertakings except when nonintrusive – POTENTIAL GROUND DISTURBING (PG)

- a. Some conservation practices that may affect cultural resources because of the potential ground disturbance during installation. For instance, practices may not be undertakings, or non-ground disturbing, if no cultural resource is present and if installation will not:
 - i. Exceed the depth, extent, or kind of disturbance caused by previous cultivation(s) or:
 - ii. Result in ground disturbance to land that has not been previously disturbed.
- b. However, practices are considered undertakings, or ground disturbing, if they disturb previously undisturbed, or “new” ground or involve a different type of disturbance. Some practices listed as PG have alternative types of implementation that require specific decisions as their effect on cultural resources; in such instances the classification would be determined on a case-by-case basis.

C. Conservation practices not considered as undertakings – NON-GROUND DISTURBING (NG)

- a. Some conservation practices are primarily management related and will not have any physical effects or alter a cultural resource. Some of these practices are not just benign but provide beneficial effects by affecting soil or cover stability. Such practices do not require cultural resources considerations.

The table below lists a classification for each practice and a description of possible extents and/or components of the practice. Each practice extent may have different classifications.

G: Ground Disturbing

PG: Potentially Ground Disturbing

NG: Non-Ground Disturbing

CODE	PRACTICE	PRACTICE EXTENT	RATING
560	Access Road (ft)	Shaping, grading, subgrading, compaction, drainage, and fill material*.	G
311	Alley Cropping (ac)	Dependent on the type of planting method (hand or mechanical) and size of tree/shrub planted.	PG
591	Amendments for Treatment of Agricultural Waste (au)	Chemical or biological amendments to wastewater. Applications are limited to manual or other methods above ground.	NG
365	Anaerobic Digester, Ambient Temperature (no)	Excavation, shaping, grading, compaction and fill material*.	G
366	Anaerobic Digester, Controlled Temperature (no)	Shaping, grading, subgrading, compaction, drainage, fill material* and concrete.	G
316	Animal Mortality Facility (no)	Shaping, grading, subgrading, compaction, drainage, fill material* and concrete.	G
575	Animal Trails and Walkways (ft)	Shaping, grading, subgrading, compaction, drainage, and fill material*.	G
450	Anionic Polyacrylamide (PAM) Erosion Control (ac)	Application of water soluble anionic polyacrylamide through existing surface and sprinkler irrigation systems.	NG
397	Aquaculture Ponds (ac)	Excavation, shaping, grading, and compaction.	G
370	Atmospheric Resources Quality Management (ac)	The management involved in atmospheric resource quality management is non-ground disturbing. However, any facilitating practices or referred practices within the standard and specifications may be considered ground-disturbing or potentially ground disturbing.	NG
310	Bedding (ac)	Establishment of ridges or furrows by plowing or blading.	PG
314	Brush Management (ac)	Mechanical removal of non-herbaceous vegetation by heavy farm equipment. Chemical removal may be considered ground disturbing.	G
322	Channel Bank Vegetation (ac)	Hand planting or seeding material along disturbed channel banks.	G
584	Channel Stabilization (ft)	Heavy equipment is used to place concrete or metal structures within channel bottom.	G
326	Clearing & Snagging (ft)	Heavy equipment is used to clear vegetation within channel and along banks.	G
360	Closure of Waste Impoundments (no)	Removing waste from existing structure by pumping with irrigation equipment or other pumping equipment than land applying waste or wastewater through spreaders is non-ground disturbing. If utilizing fill material* to backfill waste impound ground disturbance will occur.	PG
317	Composting Facility (no)	Shaping, grading, subgrading, compaction, drainage, fill material* and placement of concrete.	G
327	Conservation Cover (ac)	Planting permanent vegetative cover of grasses, legumes, trees, or shrubs.	PG
328	Conservation Crop Rotation (ac)	An adapted sequence of crops involving planting of annual crops on previously established cropland using on-farm equipment.	PG
656	Constructed Wetland (ac)	Excavation, shaping, grading, compaction and fill material*.	G

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332	Contour Buffer Strips (ac)	Dependent on grade needed to establish vegetative cover.	PG
330	Contour Farming (ac)	Dependent on grade needed to establish vegetative cover.	PG
331	Contour Orchard and Other Fruit Areas (ac)	Dependent on the planting method and vegetation used.	PG
340	Cover Crop (ac)	Establishment of grasses, legumes, or small grains using on-farm equipment.	PG
342	Critical Area Planting (ac)	Eroded areas that require shaping with heavy equipment before planting is considered ground disturbing. Around man-made structures, the area has been previously shaped and graded hence the planting itself is not ground-disturbing.	G
402	Dam (no & ac-ft)	Excavation, shaping, grading, compaction and fill material*.	G
348	Dam, Diversion (no)	Excavation, shaping, grading, compaction and fill material*.	G
324	Deep Tillage (ac)	Equipment including chisels, subsoilers, or rippers that operate below any previous plow zone.	G
356	Dike (ft)	Heavy farm equipment or construction equipment is used to place soil into a berm.	G
362	Diversion (ft)	Heavy farm equipment or construction equipment is used to excavate a channel and place soil into a berm.	G
554	Drainage Water Management (ac)	The management involved in implementing drainage water management not any facilitating practices that are considered potentially ground-disturbing or ground disturbing.	NG
432	Dry Hydrant (no)	A hole drilled, dug, driven, bored, jetted, or otherwise constructed for permanent pipeline.	G
647	Early Successional Habitat Development/Mgt. (ac)	The management involved in maintaining early successional habitat. Any facilitating practices or referred practices within the standard and specifications are considered ground-disturbing or potentially ground disturbing.	PG
592	Feed Management (no & au)	Management of nutrients fed to livestock or poultry.	NG
382	Fence (ft)	Dependent on size of post and depth.	PG
386	Field Border (ft)	Dependent on the type of site preparation, planting method, and vegetation used (grasses or shrubs).	PG
393	Filter Strip (ac)	Dependent on type of site preparation needed and planting method.	PG
394	Firebreak (ft)	Creating a new firebreak by disking or plowing.	G
396	Fish Passage (no)	Excavation, shaping, grading, and compaction.	G
398	Fish Raceway or Tank (ft & ft3)	Excavation, shaping, grading, and compaction.	G
399	Fishpond Management (no)	Regulating water flow, feed, and forage in a pond.	PG
511	Forage Harvest Management (ac)	The timely cutting and removal of forages involving on-farm equipment.	NG
490	Forest Site Preparation (ac)	Pushing and piling, chopping or disking.	G

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384	Forest Slash Treatment (ac)	Treatment includes above-ground methods including burning, chipping, mulching, and/or removal.	NG
666	Forest Stand Improvement (ac)	If species are to be removed with a chainsaw, or other hand tools and left on the ground or injected with chemicals and left standing it is considered non-ground disturbing. If trees are to be cut and/or removed with heavy equipment, then it is is ground-disturbing.	NG
655	Forest Trails and Landings (ac)	Shaping, grading, subgrading, compaction, and fill material*.	G
383	Fuel Break (ac)	A strip or block of land on which the vegetation, debris and detritus have been reduced and/or modified to control or diminish the risk of the spread of fire crossing the strip or block of land.	PG
410	Grade Stabilization Structure (no)	Trenching of pipe with water control appurtenance(s). Excavation, shaping, grading, and fill material*.	G
412	Grassed Waterway (ac)	Excavation, shaping, grading, and compaction.	G
548	Grazing Land Mechanical Treatment (ac)	Mechanical treatments include subsoiling, chiseling, or ripping.	G
561	Heavy Use Area Protection (ac)	Shaping, grading, subgrading, compaction, drainage, and fill material*.	G
422	Hedgerow Planting (ft)	Dependent on the type of planting method (hand or mechanical) and vegetation used (grasses or shrubs).	PG
423	Hillside Ditch (ft)	Excavation, shaping, grading, and compaction.	G
428B	Irr. Water Conveyance, Ditch and Canal Lining, Flexible Membrane (ft)	Site will already by previously disturbed through pond construction. Irrigation Canal or Lateral and Irrigation Field Ditch is considered a ground-disturbing practice.	NG
428C	Irr. Water Conveyance, Ditch and Canal Lining, Galvanized Steel (ft)	Site will already by previously disturbed through pond construction. Irrigation Canal or Lateral and Irrigation Field Ditch is considered a ground-disturbing practice.	NG
428A	Irr. Water Conveyance, Ditch and Canal Lining, Plain Concrete (ft)	Site will already by previously disturbed through pond construction. Irrigation Canal or Lateral and Irrigation Field Ditch is considered a ground-disturbing practice.	NG
430AA	Irr. Water Conveyance, Pipeline, Aluminum Tubing (ft)	Trenches are backfilled ranging from 24-30 inches and pipe may be placed below 30 inches depending on its diameter.	G
430BB	Irr. Water Conveyance, Pipeline, Asbestos-Cement (ft)	Trenches are backfilled ranging from 24-30 inches and pipe may be placed below 30 inches depending on its diameter.	G
430DD	Irr. Water Conveyance, Pipeline, High-pressure, Underground, Plastic (ft)	Trenches are backfilled ranging from 24-30 inches and pipe may be placed below 30 inches depending on its diameter.	G
430EE	Irr. Water Conveyance, Pipeline, Low-pressure, Underground, Plastic (ft)	Trenches are backfilled ranging from 24-30 inches and pipe may be placed below 30 inches depending on its diameter.	G
430CC	Irr. Water Conveyance, Pipeline, Nonreinforced Concrete (ft)	Trenches are backfilled ranging from 24-30 inches and pipe may be placed below 30 inches depending on its diameter.	G
430GG	Irr. Water Conveyance, Pipeline, Reinforced Plastic Mortar (ft)	Trenches are backfilled ranging from 24-30 inches and pipe may be placed below 30 inches depending on its diameter.	G

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430FF	Irr. Water Conveyance, Pipeline, Steel (ft)	Trenches are backfilled ranging from 24-30 inches and pipe may be placed below 30 inches depending on its diameter.	G
320	Irrigation Canal or Lateral (ft)	Heavy farm or construction equipment is used to clear and excavated canal or lateral.	G
388	Irrigation Field Ditch (ft)	Heavy farm or construction equipment is used to clear and excavated field ditch.	G
464	Irrigation Land Leveling (ac)	Earthmoving equipment such as a fixed blade, grader or earth pan is used.	G
552	Irrigation Regulating Reservoir (no)	Heavy farm or construction equipment is used to excavate reservoir and construct embankments. Fill material* may be needed for embankments.	G
436	Irrigation Storage Reservoir (no & ac-ft)	Heavy farm or construction equipment is used to excavate reservoir and construct embankments. Fill material* may be needed for embankments.	G
441	Irrigation System, Microirrigation (no & ac)	Pipeline may be placed just below or within the plow zone or below the plow zone. Retrofits are non-ground disturbing.	PG
442	Irrigation System, Sprinkler (no & ac)	Pipeline is ground-disturbing, but installed under 430DD. Retrofits are non-ground disturbing.	PG
443	Irrigation System, Surface & Subsurface (no & ac)	Pipeline may be placed just below or within the plow zone or within the plow zone or below the plow zone.	PG
447	Irrigation System, Tailwater Recovery (no)	Heavy equipment or construction equipment is used to excavate reservoir and construct embankment. Fill material* may be needed for embankments.	G
449	Irrigation Water Management (ac)	Managing water supplies for irrigation	NG
460	Land Clearing (ac)	Use of heavy equipment, extensive site disturbance.	G
543	Land Reclamation, Abandoned Mined Land (ac)	These sites are already or will be highly disturbed from mining activity, but reshaping may occur on undisturbed areas adjacent to existing mine.	G
544	Land Reclamation, Currently Mined Land (ac)	These sites are already or will be highly disturbed from mining activity, but reshaping may occur on undisturbed areas adjacent to existing mine.	G
453	Land Reclamation, Landslide Treatment (no & ac)	These sites are already or will be highly disturbed from landslide activity, but reshaping may occur on unstable areas.	G
455	Land Reclamation, Toxic Discharge Control (no)	There are four primary methods for controlling toxic mine drainage: (1) mine sealing, (2) infiltration control, (3) "daylighting," and (4) neutralization and precipitation.	G
466	Land Smoothing (ac)	Smoothing out surface with on-farm equipment.	G
468	Lined Waterway or Outlet (ft)	Excavation, shaping, grading, and compaction.	G
717	Livestock Shade Structure (no)	Shade fabric supported with metal structure placed on surface.	NG
634	Manure Transfer (no)	A conveyance system using structures or conduits involving shaping, subgrading, compaction, and placement of concrete.	G

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457	Mine Shaft & Adit Closing (no)	Closure of underground mine openings by filling, plugging, capping, installing barriers, gating, or fencing.	PG
482	Mole Drain (ft)	Dependent on the depth of the mole drain and the plow zone.	PG
353	Monitoring Well (ea)	A hole drilled, dug, driven, bored, jetted, or otherwise constructed.	G
484	Mulching (ac)	Composted or synthetic material is placed by hand or machine on the surface.	NG
590	Nutrient Management	Recordkeeping and/or risk assessment. Spreading of organic waste on surface with on-farm equipment.	NG
500	Obstruction Removal (ac)	Use of heavy equipment for removal of structures to natural obstructions.	G
582	Open Channel (ft)	Excavation, shaping, and grading.	G
512	Pasture & Hay Planting (ac)	Dependent on the type of site preparation and planting method.	PG
595	Pest Management (ac.)	Recordkeeping and/or risk assessment is non-ground disturbing. If non-native, invasive species are to be removed with a chainsaw, or other hand tools and left on the ground or treated with chemicals and left standing then it is non-ground disturbing. If non-native, invasive species are to be cut and/or removed with heavy equipment.	NG
516	Pipeline (ft)	Trenches are excavated ranging from 3 feet or more.	G
378	Pond (no)	Excavation, shaping, grading, compaction and if embankment, fill material*.	G
521	Pond Sealing or Lining, Bentonite Sealant (no)	Site will already be previously disturbed through pond construction. Pond is considered a ground-disturbing practice.	NG
521	Pond Sealing or Lining, Compacted Clay Treatment (no)	Site will already be previously disturbed through pond construction. Pond is considered a ground-disturbing practice.	NG
521	Pond Sealing or Lining, Flexible Membrane (no)	Site will already be previously disturbed through pond construction. Pond is considered a ground-disturbing practice.	NG
521	Pond Sealing or Lining, Soil Dispersant (no)	Site will already be previously disturbed through pond construction. Pond is considered a ground-disturbing practice.	NG
462	Precision Land Forming (ac)	Earthmoving equipment such as a fixed blade, grader or earth pan is used.	G
338	Prescribed Burning (ac)	Is typically a non-ground disturbing, but may threaten above-ground structures that are within the vicinity.	G
528	Prescribed Grazing (ac)	The management involved in implementing a rotational grazing schedule, not any facilitating practices, that could be considered ground-disturbing or potentially ground-disturbing.	PG
533	Pumping Plant (no)	Shaping, grading, subgrading, and placement of foundation. If the pumping plant is floating, it is non-ground disturbing. All pipeline associated with the pumping plant is referred to the appropriate practice.	G

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550	Range Planting (ac)	Dependent of the type of site preparation, planting method and vegetation used.	PG
562	Recreation Area Improvement (ac)	Dependent on the type of planting method (hand or mechanical) and size of tree/shrub planted. If selective removal method involves chainsaw, or other hand tools and left on the ground or treated with chemicals and left standing it is non-ground disturbing. If selective removal method involves cutting and/or removed with heavy equipment.	PG
566	Recreation Land Grading and Shaping (ac)	Shaping and grading.	G
568	Recreation Trail and Walkway (ft)	Shaping, grading, subgrading, compaction, and fill material*.	G
345	Residue and Tillage Management, Mulch Till (ac)	Tillage on previously established cropland using on-farm equipment.	PG
329	Residue and Tillage Management, No Till/Strip Till/Direct Seed (ac)	Tillage on previously established cropland using on-farm equipment.	PG
346	Residue and Tillage Management, Ridge Till (ac)	Tillage on previously established cropland using on-farm equipment.	PG
344	Residue Management, Seasonal (ac)	Tillage on previously established cropland using on-farm equipment.	PG
643	Restoration and Management of Rare and Declining Habitats (ac)	The management involved, not any facilitating and/or restorative practices that are considered ground-disturbing.	G
391	Riparian Forest Buffer (ac)	Dependent on the type of site preparation, planting method, and vegetation used.	PG
390	Riparian Herbaceous Cover (ac)	Dependent on the type of site preparation, planting method, and vegetation used.	PG
555	Rock Barrier (ft)	Excavation, grading, compaction, and if embankment, fill material*.	G
558	Roof Runoff Structure (no)	Gutters and downspouts are considered non-ground disturbing. Any underground outlet is ground-disturbing.	PG
557	Row Arrangement (ac)	Planning row direction, grade and length on previously established cropland.	NG
570	Runoff Management System (no & ac)	May include light to heavy grading to divert and retain water in swales, ditches, and small basins. Could also be accomplished through the placement of hay bales, temporary soil berms, or other materials.	G
610	Salinity and Sodic Soil Management (ac)	Management of land, water and plants to control and minimize accumulations of salts and/or sodium on the soil surface and in the crop rooting zone. May involve potentially ground-disturbing or ground-disturbing practices.	PG
350	Sediment Basin (no)	Excavation, grading, subgrading, compaction, and if embankment, fill material*.	G
646	Shallow Water Development and Management (ac)	Excavation, shaping, grading, compaction and if embankment, fill material*.	G
381	Silvopasture Establishment (ac)	Planting permanent vegetative cover of grasses, legumes, trees, or shrubs.	PG

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632	Solid/Liquid Waste Separation Facility (no)	Shaping, grading, subgrading, compaction, drainage, fill material* and placement of concrete.	G
572	Spoil Spreading (ac)	Use of heavy equipment needed spread surplus material.	G
574	Spring Development (no)	Excavation, grading, compaction, and if embankment, fill material*.	G
578	Stream Crossing (no)	Excavation, grading, compaction, and if embankment, fill material*.	G
395	Stream Habitat Improvement and Management (ac)	Excavation, shaping, and grading.	G
580	Streambank and Shoreline Protection (ft)	Shaping, grading, compaction, and/or placement of stabilizing materials (i.e. rock).	G
585	Stripcropping (ac)	Establishment of grasses, legumes, or small grains using on-farm equipment.	PG
587	Structure for Water Control (no)	Trenching of pipe with water control appurtenance(s). Excavation, shaping, grading, and fill material*.	G
606	Subsurface Drain (ft)	Trenches are excavated to accommodate pipe.	G
607	Surface Drainage, Field Ditch (ft)	On-farm equipment is used to excavate field ditch.	G
608	Surface Drainage, Main or Lateral (ft)	Heavy farm or construction equipment is used to excavate main or lateral.	G
609	Surface Roughening (ac)	Tillage on previously established cropland using on-farm equipment.	PG
600	Terrace (ft, m)	Shaping, grading, compaction, and embankment.	G
612	Tree/Shrub Establishment (ac)	Dependent on the planting method and vegetation used.	PG
660	Tree/Shrub Pruning (ac)	Pruning trees/shrubs on previously established forestland or cropland.	NG
620	Underground Outlet (ft)	Trenches are backfilled ranging from 24-30 inches and pipe may be placed below 30 inches depending on its diameter.	G
645	Upland Wildlife Habitat Management (ac)	Generally a management practices, but can include ground-disturbing practices that are cost-shared including mechanical, or heavy equipment, applications.	G
472	Use Exclusion (ac)	The management involved, not any facilitating practices that are classified as potentially ground-disturbing or ground-disturbing (i.e. fence, watering facility).	NG
601	Vegetative Barrier (ft)	Dependent of the type of site preparation, planting method and vegetation used.	PG
630	Vertical Drain (no)	A hole drilled, dug, drive, bored, jetted, or otherwise constructed.	PG
367	Waste Facility Cover (no)	Cover and anchorage system with pipe above-ground.	NG
313	Waste Storage Facility (no)	Excavation, shaping, grading, compaction, and fill material*.	G
629	Waste Treatment	If utilizing chemical or biological treatments without any mechanical manipulations. If shaping, grading, subgrading, compaction, drainage, fill material* and placement of concrete for use of mechanized treatments than the practice is ground-disturbing.	PG

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359	Waste Treatment Lagoon (no)	Excavation, shaping, grading, compaction, and fill material*.	G
633	Waste Utilization (ac)	Collection and surface application of collected manures, bedding material and other biodegradable products safe for land application.	NG
635	Wastewater Treatment Strip (ac)	Dependent of the type of site preparation, planting method and vegetation used.	PG
638	Water and Sediment Control Basin (no)	Excavation, shaping, grading, compaction, and if embankment, fill material*.	G
636	Water Harvesting Catchment (no)	Excavation, shaping, grading, compaction and fill material*.	G
642	Water Well (no)	A hole drilled, dug, drive, bored, jetted, or otherwise constructed.	G
614	Watering Facility (no)	Shaping and grading required for adequate drainage.	G
640	Waterspreading (ac)	Excavation, shaping, grading, compaction and fill material*.	G
351	Well Decommissioning (no)	Removing old equipment and plugging a previously established well.	NG
355	Well Water Testing (no)	Testing for physical, biological, and chemical characteristics of well water.	NG
658	Wetland Creation (ac)	Usually consists of other practices such as tree planting, dike construction, or placement of water control structures to accomplish objectives.	G
659	Wetland Enhancement (ac)	May consist of other practices such as tree planting, dike construction or placement of water control structures to accomplish objectives.	G
657	Wetland Restoration (ac)	May consist of other practices such as tree planting, dike construction or placement of water control structures to accomplish objectives.	G
644	Wetland Wildlife Habitat Management (ac)	Generally a management practices, but can include ground-disturbing practices that are cost-shared including mechanical, or heavy equipment, applications.	G

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