Table 1: Project Types that May be Considered for Inclusion Under Santa Cruz Countywide Partners in Restoration Permit Coordination Program for Environmentally Beneficial Projects
(Projects included under the permit coordination program may not exceed any of the dimensions shown in the third column)

Practice Name	Description	Maximum Size of the Practice Installed (and additional limitations)
1. *Access Roads (Improvement) (560) *(NOTE: Access road improvements typically involve multiple installations spread out over a long reach of road.)*	Improvement of an existing road used for moving livestock, produce, and/or equipment to provide access for proper, property management while controlling runoff to prevent erosion and maintain or improve water quality. An example of this practice might include re-grading, outsloping, or the addition of a rolling dip to a road so that water is less erosive as it travels across the road. This practice may also be used for repair or removal of culverts from non-fish bearing[1] streams associated with access road improvements. This practice is used only on existing roads. Some examples of practices from the California Department of Fish and Game, California Salmonid Stream Habitat Restoration Manual that could be utilized during implementation of the Access Road (Improvement) practice includes Waterbars (p. VII-96).	Work performed over a maximum of **12 miles** Length: Average: 1,000 linear feet of work spread out over 2 miles; Max: 2,000 linear feet of work spread out over 12 miles. Width: Average: 30'; Max: 30'. Area: Average: 0.8 acres; Max: 1.5 acres. Volume[3] : Average: 750 cubic yards; Max: 1,500 cu. yards (or 1,000 cu. yards in Coastal Zone Scenic Areas).
2. Critical Area Planting (342)	Planting of vegetation such as trees, shrubs, vines, grasses, or legumes (see Attachments 1 and 2 for lists of preferred and prohibited species for revegetation), on highly erodible or critically eroding areas (does not include tree planting mainly for wood products). This practice is used to stabilize the soil, reduce damage from sediment and runoff to downstream areas, and improve wildlife habitat and visual resources. Plants may take up more of the nutrients in the soil, reducing the amount that can be washed into surface waters or leached into ground	Length: Average: 500'; Max: 1 mile (e.g., riparian areas). Width: Average: 20'; Max: 20'. Area: Average: 0.25 acre; Max: 2.5 acres. Volume[3]: Average: 200 cu. yards; Max: 1,000

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	water. During grading, seedbed preparation, seeding, and mulching, quantities of sediment and associated chemicals may be washed into surface waters prior to plant establishment.	cu. yards.
3. Diversion (swales to slow runoff) (362)	Construction of a channel across a slope generally with a supporting ridge on the lower side to slow and redirect surface flow. This practice results in a reduction of sheet and rill erosion by reducing the length of slope. Sediment may also be reduced by the elimination of gullies, reducing the amount of sediment and related pollutants delivered to the surface waters. This practice may also be used to deliver water to a sediment basin or an open area where runoff can infiltrate the ground at a natural rate of flow. This practice does not result in a change in volume of flow, or flow reduction in surface waters. This practice does not involve the diversion of water from a waterway, nor in the redirection of flow to a new watershed, nor any other potential off-site impacts. This practice applies to sites where: 1) runoff damages cropland, pastureland, farmsteads, or conservation practices; 2) surface flow and shallow subsurface flow caused by seepage are damaging land; 3) runoff is in excess and available for use on nearby sites; 4) a diversion is required as part of a pollution abatement system; or 5) a diversion is required to control erosion and runoff.	Length: Average: 1,000'; Max: 2,000' (assume 10' wide and 1' deep). Width: Average: 10'; Max: 10'. Area: Average: 0.2 acre; Max: 0.5 acre. Volume[3]: Average: 400 cu. yards; Max: 800 cu. yards. Flow Rate: Max: 100 cubic fee per second (cfs)
4. Filter Strip (393)	Installation of a strip or area of vegetation for trapping sediment, organic matter, and other pollutants from runoff and wastewater. The strip or area is situated between cropland, grazing land, or disturbed land (including forest land) and environmentally sensitive areas. Installation often requires soil manipulation to remove surface	Length: Average: 500'; Max: 2,000'. Width: Average: 20'; Max: 20'. Area: Average: 0.25 acre; Max: 1 acre.

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	irregularities and prepare for planting. When the field borders are located such that runoff flows across them in sheet flow, coarser grained sediments are filtered and deposited. Pesticides and nutrients may be removed from runoff through infiltration, absorption, adsorption, decomposition, and volatilization thereby protecting water quality downstream. However, they may not filter out some soluble or suspended fine-grained materials, especially during heavy rain events. Filter strips may also reduce erosion on the area on which they are constructed.	Volume[3]: Average: 200 cu. yards; Max: 800 cu. yards.
5. Fish Stream Improvement (395)	Improvement of a stream channel to create new fish habitat or to enhance an existing habitat. The practice is used to improve or enhance aquatic habitat for fish in degraded streams, channels, and ditches by providing shade, controlling sediment, and restoring pool and riffle stream characteristics. Pools and riffles are formed in degraded stream sections through the strategic placement of logs, root wad, or natural rocks that reduces the flow velocity through the area. Coarse-grained sediments settle, reducing the quantity of sediment delivered downstream. The dissolved oxygen content may be increased, improving the stream's assimilative capacity. This practice may also be used for removal or modification of fish barriers such as flashboard dams or logjams. The modification of flashboard dams may involve cutting a notch in the dam to allow for fish passage. Complete removal of flashboard dams would also be covered under the program. This practice may be used for the removal or modification of logjams that present a complete barrier to all life stages of anadromous fish passage. If the logjam does not act as a complete barrier, logjam	Maximum Length: 1 mile with multiple structures at multiple bank locations. Maximum dimensions for a logjam to be modified: 30 ft by 50 ft (across channel) Maximum dimensions for a flashboard dam to be modified or removed: 15 ft by 60 ft (across channel) Maximum dimensions for hardened crossings (fords) to be removed/replaced: 15 ft by 60 ft (across channel) Maximum bridge size to be installed: Max.100 ft (across stream) with 20 ft wide deck (20 ft is what the County of Santa Cruz prefers for

Practice Name	Description	Maximum Size of the Practice Installed (and additional limitations)
	removal may be implemented no more than two times annually under the program, but only if the following circumstance exists: In situations where water is actively or potentially deflecting water to a bank, threatening further erosion, bank failure, destruction of conservation practices installed to stabilize the bank, or threatening damage to life and housing, the logjam may be modified to minimize this threat. This practice may be used to remove culverts that pose barriers to fish passage and replacement of an existing culvert with a crossing that improves fish passage. This practice may also be used to remove hardened crossings that pose barriers to salmonid passage such as culverts and simple fords that do not have complicated associated resource issues, and replace them with bridges, bottomless arch culverts, or embedded culverts that do allow for fish passage. While most activities will occur during the summer months when most areas are dry, dewatering may be required for some projects involving the fish stream improvement practices. Dewatering a portion of a stream during construction would involve isolating the work area using temporary structures such as cofferdams and the pumping of water around the worksite in order to maintain flows downstream. The Fish Stream Improvement practice will be designed and implemented in accordance with the California Department of Fish and Game's *California Salmonid Stream Habitat and Restoration Manual* or in coordination with NOAA Fisheries and CDFG Some examples of the practices that could be utilized during implementation of the Fish Stream Improvement practice include Digger Logs (p. VII-26 of the manual), Spider Logs (p. VII-27), and Log, Root Wad, and	emergency vehicles but it's more likely that most bridges installed under the permit coordination program would not exceed 16 ft in width) *Maximum and total area to be dewatered will not exceed 200 ft over the one mile maximum.

Practice Name	Description	Maximum Size of the Practice Installed (and additional limitations)
	Boulder Combinations (p. VII-28).	
6. Grade Stabilization Structure (410) ***(In non-fish bearing streams, primarily for gully repair)***	Installation of a structure built into a gully to control the grade and prevent head cutting in natural or artificial channels. For the purposes of the Master Permit program, this practice will not be installed in fish bearing streams and would primarily be used for gully repair. This practice refers to rock, timber, or vegetative structures, such as a brush mattress, placed to slow water velocities above and below the structure, resulting in reduced erosion. This practice also involves earthmoving to reshape the area impacted by the gully. This will decrease the yield of sediment and sediment-attached substances and improve downstream water quality. An example of a practice from the CDFG California Salmonid Stream Habitat Restoration Manual that could be utilized during implementation of the Grade Stabilization practice is Brush Mattressing (p. VII-79).	Length: Average: 3 to 4 structures per 500' of gully, Max: 10 structures per 1,000' of gully. Area: Average: 0.5 acres; Max: 1.5 acres Volume[3]: Max: 30 cu. yards per structure; 300 cu. yards total. Flow Rate: Max: 300 cfs in the pipe.
7. Grassed Waterway (412)	Establishment of a natural or constructed channel that is shaped or graded to required dimensions and expected velocities, and establishment of suitable vegetation for the stable conveyance of runoff. This practice may reduce the erosion in a concentrated flow area, such as a gully. This may result in the reduction of sediment and substances delivered to receiving waters. Vegetation may act as a filter in removing some of the sediment delivered to the waterway, although this is not typically the primary function of a grassed waterway. Grassed waterways may be used to reduce the erosive force of runoff from agricultural lands into riparian or wetland areas or into a sediment basin. Grading and seedbed preparation may result in some short-term soil loss prior to establishment of vegetative cover.	Length: Average: 1,000'; Max: 2,000'. Width: Average: 20'; Max: 20'. Area: Average: 0.5 acre; Max: 1 acre. Volume[3]: Average: 1,000 cu. yards; Max: 2,000 cu. yards (except in Coastal Zone Scenic Areas where the maximum grading allowed is 1,000 cu. yards). Flow Rate: Max: 150 cfs.

Practice Name	Description	Maximum Size of the Practice Installed (and additional limitations)
8.Obstruction Removal (500)	Removal and disposal of unwanted structures from waterways including cars, large appliances, and garbage (items that are anthropogenic and not natural to the system). Large objects such as cars and appliances would be removed unless their removal would result in a (net) detrimental effect. For example, cars will not be removed if the action would result in disturbance to a significant area (beyond the scope of this program), which could result if it was discovered that multiple cars were stacked behind one another under a stream bank. Structures would be removed when the stream channel is dry or during the lowest flows to minimize impacts. While most activities will occur during the summer months when most areas are dry, dewatering may be required for some projects involving removal of large objects such as cars and appliances. Dewatering a portion of a stream during construction would involve isolating the work area using temporary structures such as cofferdams and the pumping of water around the worksite in order to maintain flows downstream.	Length: Max: 50'. Area: Average: 10' x 15'; Max: 0.2 acre.
9. Pipeline (516)	Use of a pipeline for conveying water from an existing source of supply to points of its use for livestock; to shift livestock to constructed waters sources and away from streams and lakes. This practice is designed to reduce bank erosion, sediment yield, and manure entering watercourses. Occasionally, a pipeline may cross streams or water courses. The maximum livestock pipeline diameter would be 3 inches. While most activities will occur during the summer months when most areas are dry, dewatering may be required for some projects involving installation of a pipeline. Dewatering a portion of a stream during construction would involve isolating the work area using temporary structures such as cofferdams and the pumping of	Length: Average: 50'; Max: 200' through riparian areas (includes 50' on each bank and across a stream or gully), and up to 10,000' through the upland areas. Maximum livestock pipeline diameter would be 3 inches. Width: Average 15'; Max: 20'. Area: Max: 4,000 sq. ft. through riparian areas/crossing streams[6]

Practice Name	Description	Maximum Size of the Practice Installed (and additional limitations)
	water around the worksite in order to maintain flows downstream.	Volume[3]: Average: 15 cu. yards; Max: 50 cu. yards through riparian areas[7]. Pressure: Max: 300 psi.(Highest capacity for a pipeline would not exceed 300 pounds per square inch)
10. Restoration and Management of Declining Habitats (643)	Restoring and conserving rare or declining native vegetated communities and associated wildlife species. This practice is used to restore land or aquatic habitats degraded by human activity; provide habitat for rare and declining wildlife species by restoring and conserving native plant communities; increase native plant community diversity; management of unique or declining native habitats (see Attachments 1 and 2 for lists of preferred and prohibited species for revegetation). This practice may be used to remove invasive plant species in sensitive resource areas in order to improve the quality of the adjacent aquatic habitat.	Length: Average: 500'; Max: 1 mile. Area: Average: 0.25 acre; Max: 2.5 acres. Volume[3]: Average: 50 cu. yards; Max: 500 cu. yards.
11. Sediment Basins (350) [with or without water control (638)]	Construction of basin(s) to collect and store debris or sediment. Sediment basins will trap sediment, sediment associated materials, and other debris and prevent undesirable deposition on bottomlands and in waterways and streams. Basins are generally located at the base of agricultural lands adjacent to natural drainage or riparian areas. Sediment basins shall not be constructed in a stream channel or other permanent water bodies. This practice may also involve designing the sediment basin to control water volumes leaving a site and releasing the water at a natural flow rate. If water control were recommended by the NRCS, an earth embankment or a combination ridge and channel design constructed across the slope and minor watercourses would be	Area: Average: 0.1 acre; Max: 0.5 acre. Volume[3]: Average: 400 cu. yards; Max: 2,000 cu. yards (compacted embankment); in Coastal Zone Scenic Areas no more than 1,000 cu. yards total grading volume. Impoundment Volume: Average: 0.5 acre-foot; Max: 2 acre-feet. Impoundment Structure: Average: 6 ft

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	implemented to form a sediment trap and water detention basin. The practice does not treat the source of sediment but provides a barrier to reduce degradation of surface water downstream. Due to the detention of runoff in the basin, there is an increased opportunity for soluble materials to be leached toward the ground water. Basins may also increase groundwater recharge. The design of spillways and outlet works will include water control structures to prevent scouring at discharge point into natural drainage. Only the outfall structures associated with these basins will result in deposition of fill within Waters of the U.S.	embankment measured from the lowest point in the basin to the spillway at a 2:1 maximum slope; Max: 6 ft – 10 ft embankment measured from the lowest point in the basin to the spillway at a 2:1 maximum slope.
****12. Stream bank Protection (580)***	Use of vegetation or structures to stabilize and protect banks of streams, lakes, or estuaries against scour and erosion. "Bioengineered" solutions using vegetation and soft materials (as opposed to concrete and rip rap, for example) are the preferred options where conditions are favorable for their use. The banks of streams and water bodies are protected by vegetation to reduce sediment loads causing downstream damage and pollution and to improve the stream for fish and wildlife habitat as well as protect adjacent land from erosion damage. Examples of this practice may include willow sprigging, brush mattressing, and live vegetative crib walls. This practice can be applied to natural or excavated channels where the stream banks are susceptible to erosion from the action of water or debris or to damage from livestock or vehicular traffic. The streambed grade must be controlled before most permanent types of bank protection can be considered feasible. Some examples of practices from the California Department of Fish and Game's *California Salmonid Stream Habitat Restoration Manual* that could be utilized during implementation of	Length: Vegetation Average: 200'; Vegetation Max: 2,000'. Rock Max: 200' contiguous rock protection and 500' of non-contiguous protection over 2,000' of bank. Width: Vegetation Average: 20'; Vegetation Max: 50'. Rock Average: 4'; Rock Max: 5'. Area: Average Vegetation: 0.1; Max Vegetation: 2.5 acre. Rock Protection Max: 0.1 acre Volume[3]: Average Vegetation: 500 cu. yards; Max Vegetation: 4,000 cu. yards[9] (or 1,000 cu. yards in all Coastal Zone Scenic Areas). Average Rock: 100 cu. yards; Max Rock: 300 cu. yards.

Practice Name	Description	Maximum Size of the Practice Installed (and additional limitations)
	the Streambank Protection practice include Log Cribbing (p. VII-68), Live Vegetative Crib Wall (p. VII-69), Logbank Armor (p. VII-70), Riprap (p. VII-65), Native Material Revetment (p. VII-75), Willow Sprigging (p. VII-77), Brush Mattressing (p. VII-77), and Trenching (p. VII-80). While most activities will occur during the summer months when most areas are dry, dewatering may be required for some projects involving implementation of streambank protection measures. Dewatering a portion of a stream during construction would involve isolating the work area using temporary structures such as cofferdams and the pumping of water around the worksite in order to maintain flows downstream.	Flow Rate: Vegetation Max: 2,000 cfs instream.
13. Stream Channel Stabilization (584)	Stabilization of the channel of a stream with suitable structures. "Bioengineered" solutions using vegetation and soft materials (as opposed to concrete and rip rap, for example) are the preferred options where conditions are favorable for their use. This practice applies to stream channels undergoing damaging aggradation or degradation that cannot be reasonably controlled with upstream practices (establishment of vegetative protection, installation of bank protection, or by the installation of upstream water control measures). The design and installation of grade stabilization structures produce a stable streambed favorable to wildlife and riparian growth. The Master Permit program does not cover projects that involve installation of grade stabilization structures in fish bearing steams. In non-fish bearing streams, this practice may be utilized to remove accumulated sand or sediment that have caused the channel to become plugged due to a large storm event or bank failure. This practice would not be used in fish-bearing streams or for routine maintenance	Length: Average: 200'; Max: 2,000'. Width: Average: 20'; Max: 20'. Area: Average: 0.1 acre; Max: 1 acre. Volume[3]: Average: 200 cu. yards; Max: 1,500 cu. yards (1,000 cu. yards in Coastal Zone Scenic Areas). Flow Rate: Max: 400 cfs.

Practice Name	Description	Maximum Size of the Practice Installed (and additional limitations)
	involving dredging of a waterway. This practice would be used to remove sediment that has accumulated, primarily as a result of a catastrophic event such as a flood, and would only be used once at a given location under this program. While most activities will occur during the summer months when most areas are dry, dewatering may be required for some projects involving installation of the stream channel stabilization practices. Dewatering a portion of a stream during construction would involve isolating the work area using temporary structures such as cofferdams and the pumping of water around the worksite in order to maintain flows downstream.	
14. Structure for Water Control (587)	Installation of a structure in an irrigation, drainage, or other water management system, including streams and gullies, that conveys water, controls the direction or rate of flow, or maintains a desired water surface elevation, such as culverts, pipe drops or chutes within gullies, debris screens, etc. Structure for water control is used to replace or retrofit existing culverts that are either not functioning properly or are a barrier to fish passage. The placement of new culverts, when environmentally beneficial, is also covered. By controlling the velocity of water running through an area, this practice reduces erosion and prevents down cutting of stream channels. Culverts will be consistent with California Department of Fish and Game's "Culvert Criteria for Fish Passage" (April 2003) and National Marine Fisheries Service Southwest Region's "Guidelines for Salmonid Passage as Stream Crossings" (September, 2001).	Flow Rate: Max: 40 cfs.
15.	Installation of a conduit beneath the surface of the ground to collect surface water and convey it to a suitable outlet. This practice is	Length: Max. in Riparian Areas: 50'.

Practice Name	Description	Maximum Size of the Practice Installed (and additional limitations)
Underground Outlets (620)	typically, although not always, associated with a sediment basin (with or without water control). Excess surface water generated by farmland on steep terrain can be collected and conveyed to a sediment basin by installing pipe safely buried underground. Location, size, and number of inlets are determined to collect excess runoff and prevent erosive surface flow. This runoff is then discharged at sediment basin where high velocity runoff is calmed and suspended sediment is trapped prior to releasing water into natural drainage channel. The basin is designed to release water at a natural rate of flow.	Width: Max. in Riparian Areas: 20'. Area: Max. in Riparian Areas:1,000 sq. ft. Volume[3]: Max. in Riparian Areas: 10 cu. yards[11]. Flow Rate: Max. in Riparian Areas: 60 cfs.

1. A "fish-bearing stream" is defined as a stream located within the range of the listed species (Central California Coast (CCC) Evolutionarily Significant Unit (ESU) Coho, the CCC steelhead, and South Central Coast ESU Steelhead) and/or designated critical habitat for these salmonids. The County of Santa Cruz and CDFG fisheries experts prepared a GIS-based summary of the existing information on salmonid distribution in Santa Cruz County streams "Steelhead and Coho Salmon Distribution", County of Santa Cruz, May, 2004. The NRCS and RCD will utilize this map, and any subsequent updates to it, during the initial project assessment to determine if the project is taking place in a fish-bearing stream.
2. Dimensions refer to actual area of improvement.
3. Volume of soil disturbed, based on practice installation and representing the volume of soil excavated and used as fill or removed from site, or soil imported as fill.
4. The "ordinary high water mark" on non-tidal rivers is defined by the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas. Some indicators of the ordinary high water mark include water staining, shelving, and evidence of debris, among other potential indicators.
5. Actual objects rarely exceed 10 ft. x 15 ft. Access to an object may involve disturbance of up to 50' in length. It is difficult to estimate the total number of separate objects to be removed from a stream. Maximum disturbance per project is limited to .2 acres.
6. Area of practice includes a 100' stream width with 50' on either side of stream (total length 200') and a 20' wide potential work area for equipment.
7. Volume of soil is based on a 2' wide trench over 200' buried to a depth of 3'
8. For vegetation treatments, soil disturbance is assumed to be a maximum of 700' of 2,000' maximum reach. The average depth of soil grading (cut or fill) is 3'.

9. Numbers provided for rock armoring refer to actual areas and volume of rock placed only. Total soil disturbance limits are same as for vegetative treatments since remainder of work area will be vegetated. Rock placed would be used at the toe of the bank in conjunction with bioengineering techniques.
10. Area of practice within riparian area includes a 50' length and a 20' wide work area for equipment. Volume of soil is based on a 2' wide trench over 50' with pipe buried to an average depth of 2'.

Universal Restrictions on Projects Carried out Under the Permit Coordination Program:

1. The County and Coastal Commission approvals do not apply to projects conducted within Coastal Commission's retained coastal permitting jurisdiction (e.g., all State tidelands, including any lands lying below the mean high tide line, submerged lands, filled areas that previously were below the mean high tide line, coastal lagoons/estuaries, public trust lands, etc.). Any qualifying environmental enhancement projects in these areas, while encouraged, shall require separate Coastal Commission approval.

2. Per conditions developed in coordination with U.S. Army Corps of Engineers, total permanent (fill) impacts to waterways and wetlands may not exceed more than 0.5 acre and may not result in (permanent) fill of more than 0.25 acre of wetland.

3. Per RWQCB requirements, soil disturbance of one acre or greater may require a Central Coast Regional Water Quality Control Board (RWQCB3) stormwater permit. The NRCS and RCD will contact the RWQCB3 on a case by case basis.