

**Natural Resources Conservation Service
Field Office Technical Guide
Pacific Islands Area**

**Section I-B-1.
Cost Data, Payment Rates, and Payment Schedules -
Introduction**

Section I-B-3 includes cost-related data products used for the purpose of carrying out Natural Resource Conservation Service (NRCS) conservation planning activities and financial assistance program contracting and contract payment activities.

Link to NRCS Pacific Islands Area eFOTG Section I cost data for conservation planning activities:

- <ftp://ftp-fc.sc.egov.usda.gov/Hi/pub/technical/4%20PI%20Schedules%20for%20eFOTG/>

Link to NRCS Pacific Islands Area financial assistance program payment schedules:

- <http://www.hi.nrcs.usda.gov/programs/>

Purpose for Developing Cost Data

NRCS is instituting the development and use of cost data in order to achieve four primary objectives:

First, in order to comply with international treaties and Internal Revenue Service regulations, NRCS will use the new cost data to document the direct costs and income losses associated with the implementation of conservation practices and enhancement activities.

Second, NRCS has initiated an effort to streamline the contracting and contract payment processes in order to reduce the amount of time these activities require and increase the time available for NRCS C's and planners to provide technical assistance to producers at the field level. This process was developed with the intent of significantly reducing the number of practice/activity line items included in each financial assistance contract.

Third, the development of payment schedules will eliminate uncertainty as to the level of actual payments to producers, enabling prospective conservation program participants to do advance financial planning and make sound decisions as to whether or not they can afford to implement specific conservation practices or enhancement activities. This will make it possible for them to enroll in conservation programs with full confidence that they will be able to fulfill the financial aspects of their contract obligations.

Finally, creating a clear distinction between Section I cost data—used for planning purposes—and program payment schedules—used for contracting purposes—will eliminate the problems that have previously existed as a result of both producers and NRCS staffers using “cost” lists, which were in actuality program payments lists, in order to estimate the costs of applying conservation practices and enhancement activities—a purpose for which the previous cost lists were not designed.

Cost Data

Each State was instructed to develop a database containing cost data related to the implementation of NRCS conservation practices and enhancement activities. The basic database may contain a wide variety of types of data from many sources. Appropriate sources of information include past NRCS cost lists and related cost data, contract receipts, suppliers of all types, contractors, agricultural suppliers, conservation partners, external cost databases, internet data sources, published catalogs, agricultural statistics, commercially-available cost estimating models or tools, ProTracts (if available and properly formatted) or other contract payment records, and any other reliable source. "Rules of thumb" may be used when estimating costs for which data are not readily available through conventional sources. Section I cost data may also include hyperlinks to internal and external sources of cost data.

Cost data will be recorded and summarized according to national policy. **Records must be recorded and maintained in accordance with the Records Guide located in General Manual Title 120, Part 408.**

Each State is expected to follow the basic Excel-based National Cost Data Template format provided by National Headquarters. There are, however, a variety of ways in which this format may be adopted, and specific implementation styles may vary from one State to another depending on data sources and levels of expertise in using spreadsheet tools.

This basic cost database will be used to create two distinct groups of products:

1. Program-neutral electronic Field Office Technical Guide (eFOTG) Section I cost data
2. Financial assistance program payment schedules

The cost data contained in the eFOTG Section I will serve two purposes: First, for the purposes of conservation planning, this section of the eFOTG will provide information to assist NRCS personnel and conservation cooperators in developing accurate, individualized cost estimates specific to cooperators' conservation plans and the projects or practices to be implemented. Second, for the purposes of NRCS financial assistance programs contracting, it will serve as the fundamental basis for developing payment rates and payment schedules.

Typical scenarios and cost data will be developed and maintained at the State level. Cost data will be updated at least annually to determine if payment rate changes are required. Cost data changes can be made at any time if supported by justification. Generally, cost data for a given practice do not need to be adjusted unless the total cost of implementing that practice has increased or decreased by more than 10 percent. State Conservationists (STCs) will consult with neighboring STCs to ensure cost data consistency along boundaries.

At a minimum, the economist is responsible for developing supporting cost data for all approved practices for all financial assistance programs within their State, as directed by the Programs Manager for that State. If staffing limitations or time constraints do not permit data collection for all approved cost categories for all approved practices, some cost categories may be omitted.

As instructed, the Pacific Islands Area developed supporting cost data for all approved practices for all financial assistance programs. No cost data was developed for enhancement activities because none have been approved for the Conservation Security Program (CSP), to date.

Typical Implementation Scenarios and Practice/Activity Types

As is the case for Section I cost data, typical scenarios and practice/activity types will be developed and maintained at the State level. For each conservation practice or enhancement activity, State staffs will identify the most common resource settings and circumstances in which the practice/activity is typically implemented. Each of these resource settings is defined as a "typical implementation scenario". Each implementation scenario will include information such

as typical sizes, amounts, acreages, degrees of complexity, etc. as pertaining to how each practice or activity is most often implemented. Within each of these implementation scenarios, the manner in which the practice/activity is most-often applied will be defined as a practice/activity type.

Cost data was developed for all approved practices for financial assistance programs in the Pacific Islands Area for typical scenarios and practice/activity types by geographic area (Hawaii, the PI – West Area, or for the entire Pacific Islands Area as a whole).

Link to NRCS Pacific Islands Area eFOTG Section I cost data for conservation planning activities:

- <ftp://ftp-fc.sc.egov.usda.gov/HI/pub/technical/4%20PI%20Schedules%20for%20eFOTG/>

An example of a scenario for Fence (382) might be, “Gently rolling pastureland on rocky, silt-loam soils. Fence is part of a rotational grazing system for cattle.” Within this particular scenario, the practice/activity type is, “barbed wire”. For Fence (382), a State might choose to include additional practice/activity types as needed to address natural resource concerns. For fence, that could be electric, woven wire, or game-proof fence.

For the majority of conservation practices, NRCS State specialists were instructed to identify no more than six practice/activity types for which they will develop payment rates. For those practices or activities that are very complex in nature and which are highly variable how they are implemented, the number of practice/activity types may be increased beyond six. This is permitted, however, only to the extent that is deemed absolutely necessary.

Cost Categories

For each practice/activity type, the actual cost of implementation was identified to the fullest possible extent. To this end, state staffs were instructed to obtain cost data for as many of the approved cost categories as possible. Cost categories include:

- Materials
- Equipment
- Labor
- Mobilization
- Operation & Maintenance
- Acquisition of Technical Knowledge
- Forgone Income
- Risk
- Administration and Permit Costs

Where data sources do not permit splitting costs into multiple categories, it is permissible to “lump” them into a single category. It is preferable, however, to break-out costs into as many of the cost categories as possible. There will be cases in which given cost categories do not apply to a specific practice standard or enhancement activity. In these cases, the costs for those cost categories unspecified (see cost categories table below) may be left unspecified. In all cases, the reason for a “zero” entry for a given cost category (whether for reasons of “lumping”, for reasons of unavailable data, or due to inapplicability of a cost category) should be noted in the cost documentation spreadsheet to the fullest practical extent.

Basic cost data should include figures for as many cost categories as possible. Only those cost categories which are approved for use, however, may be used in calculating payment rates.

National Cost Data Template

Cost Data

<u>Typical Implementation Scenario</u>		
One quarter-mile of 3-inch pipeline, installed on mostly level, silt-loam, cropland		
Part of a irrigation water delivery system		
Geographic Area:	Statewide	
Unit for Cost Estimate:	Feet	
Practice Life (Years):	20	
Discount Rate (%/Year):	5%	<u>Cost/Unit</u>
<u>Materials</u>		\$2.09
Type	PVC	
Pipe Diameter	3	
PSI-Type	160	
Pipe Cost (\$/Lb/LF)	\$0.56	
(See PipeCost Worksheet)		
<u>Appurtenances (installed):</u>		
Vacuum Release Valve	\$0.70	
Spacing (feet):	250	
Cost (each):	\$175	
Pressure Relief Valve	\$0.50	
Spacing (feet):	450	
Cost (each):	\$225	
Drain	\$0.33	
Spacing (feet):	750	
Cost (each):	\$250	
Total Appurtenance Costs:	\$1.53	
<u>Equipment/Installation</u>		\$1.29
Trencher, backhoe, hand tools		
Equipment & labor costs are approximately 2 times the materials cost		
Equipment/labor costs are approximately 60% equipment		
Install an average of 100 feet of pipe per hour		
Pipe Laying	\$0.90	
Total Trench Excavation	\$0.20	
Backfill - Bedding	\$0.05	
Backfill - Pipe to Surface	\$0.14	
Total Installation Cost:	\$1.29	
<u>Labor</u>		\$0.00
Labor costs are include in Equipment/Installation Costs		
<u>Mobilization</u>		\$0.17
Five percent of materials, equipment/Installation and labor costs		
<u>Operation & Maintenance</u>		\$0.84
2% of materials, equipment/Installation and labor costs		
Present value over the practice life		
<u>Acquisition of Technical Knowledge</u>		\$0.00
Pipe installation skills, design, layout		
<u>Forgone Income</u>		\$0.00
None, no land taken out of production		
<u>Risk</u>		\$0.00
Reduced risk, better irrigation water control		
<u>Administration & Permit Costs</u>		\$0.00
None		
Total Cost Estimate:		\$4.40

Payment Rates

Each eligible practice/activity will have a payment rate, which will be the unit rate of compensation for program participants. The payment rate is the sum of all approved cost categories for the practice/activity multiplied by the STC-approved program payment percentage.

Each eligible practice/activity will have a payment rate, which will be the unit rate of compensation for program participants. The payment rate is the sum of all approved cost data categories for the practice/activity multiplied by the STC-approved program payment percentage. Program payment percentage limits are established by program regulation. The Conservation Programs Manual defines the payment percentage limits that will be used in establishing each program’s payment rates. The national program managers are responsible for defining the approved cost categories that will be used to develop payment rates. The Cost Categories Matrix for Program Payment Rates below identifies the approved cost categories by program that will be used in setting payment rates. Payment rate documentation to support each program’s payment rates will be maintained in Section I of the eFOTG.

Payment Rate Development Methodology

Practice Name: Fence (382)			
Practice Type: Barbed Wire			
Program: EQIP			
<u>Cost Category</u>	<u>Cost/Unit</u>	<u>EQIP Payment Percentage</u>	<u>EQIP Payment Rate</u>
Materials	\$0.75	50%	\$0.38
Equipment/Installation	\$0.10	50%	\$0.05
Labor	\$1.50	50%	\$0.75
Mobilization	\$0.12	50%	\$0.06
Operation & Maintenance	\$0.46	0%	\$0.00
Acquisition of Technical Knowledge Forgone Income	\$0.00	0%	\$0.00
Risk	\$0.00	0%	\$0.00
Administration & Permit Costs	<u>\$0.00</u>	0%	<u>\$0.00</u>
Total:	\$2.93		\$1.24

For the fence payment rate in the example above, the EQIP rule provides that the maximum cost-share payment will not be more than 75 percent of the cost of a structural practice. As part of the development of the payment rate in the example, the STC, with advice from the State Technical Committee, has set the program payment percentage at 50 percent. In this case, the approved cost categories used for the payment rate were materials, equipment/installation, labor, and mobilization.

COST CATEGORIES MATRIX FOR PROGRAM PAYMENT RATES				
Approved cost categories by program to be used in setting payment rates				
Cost Category	Structural Practices	Vegetative Practices	Management Practices	Enhancement Activities
Materials	A,C,E,W	A,C,E,W	A,E	C
Equipment/Installation	A,C,E,W	A,C,E,W	A,E	C
Labor	A,C,E,W	A,C,E,W	A,E	C
Mobilization	A,C,E,W	A,C,E,W	A,E	C
Operation & Maintenance				
Acquisition of Technical Knowledge			A*,E*	C*
Forgone Income			A,E	C
Risk			A,E	C
Administration & Permit Costs				
A - Agricultural Management Assistance (AMA) C - Conservation Security Program (CSP) E - Environmental Quality Incentives Program (EQIP) W - Wildlife Habitat Incentives Program (WHIP) * - to be used when technical support is provided by other than NRCS				
Definitions for determining AMA, CSP, EQIP and WHIP payment rates:				
Structural Practice	A conservation practice that primarily involves the establishment, construction, or installation of a site-specific measure to conserve, protect from degradation, or improve soil, water, or related natural resources in the most cost-effective manner. Examples include, but are not limited to, animal waste management facilities, terraces, grassed waterways, tailwater pits, livestock water developments, and capping of abandoned wells.			
Vegetative Practice	A conservation practice that primarily involves the establishment or planting of a site-specific vegetative measure to conserve, protect from degradation, or improve soil, water, or related natural resources in the most cost-effective manner. Examples include, but are not limited to, contour grass strips, filterstrips, critical area plantings, and permanent wildlife habitat. This practice has a service life (life span) of more than one year.			
Management Practice	A conservation practice that requires primarily management techniques and methods to implement the practice and has a service life (life span) of one year. Examples include, but are not limited to cover crop, nutrient management waste utilization, pest management, and irrigation water management.			
Enhancement Activities	Actions other than conservation practices that are included as a part of a conservation stewardship contract, such as a measure, incremental movement on a conservation index or scale, or an on-farm demonstration, pilot, or assessment.			

Payment Schedules

The payment schedule is a listing of all eligible practice and/or activity payment rates for the defined geographical area. There should be only one payment schedule per State for each program except where compelling economic differences among regions justify the development of separate payment schedules. States are to coordinate across state boundaries in order to ensure payment schedule consistency within similar geographic areas.

Link to NRCS Pacific Islands Area financial assistance program payment schedules:

- Hawaii: <http://www.hi.nrcs.usda.gov/programs/>

Payment schedules will be developed annually, supplemented as needed, and maintained at the State level. Changes to payment schedules generally should not be made unless individual payment rates have increased or decreased by 10 percent or more. A payment schedule will be maintained for each of the subject conservation programs available to producers. States are encouraged to maintain consistency in payment schedules among programs.

Payment schedules and supplements require STC approval. Payment schedules for programs other than CSP will be approved by the STC, and RAC as needed, posted to the State Web site, and uploaded to ProTracts following year end shutdown activities during October each year. As CSP is delivered in selected watersheds, a separate directive will be issued for the timing of CSP payment schedule development. All payment schedules will be maintained in Section I of the eFOTG, in the approved Customer Service ToolKit/ProTracts EXCEL format. Below is an example of an EQIP payment schedule.

Payment Schedule Format

EQIP Payment Schedule					
Practice Code	Program	Practice Name	Practice/Activity Type	Unit Type	Payment Rate
328	EQIP	Fence (Ft.)	Electric Wire	Foot	\$1.09
328	EQIP	Fence (Ft.)	Electric Wire, Temp	Foot	\$0.95
328	EQIP	Fence (Ft.)	Barbed Wire	Foot	\$1.24
595	EQIP	Pest Management (Ac.)	Mechanical	Acre	\$35.00
595	EQIP	Pest Management (Ac.)	Biological	Acre	\$15.00
595	EQIP	Pest Management (Ac.)	Chemical	Acre	\$4.00
410	EQIP	Grade Stabilization Structure (No.)	Typical, Complete	Each	\$665.13
590	EQIP	Nutrient Management (Ac.)	Low	Acre	\$1.63
590	EQIP	Nutrient Management (Ac.)	Moderate	Acre	\$2.00
590	EQIP	Nutrient Management (Ac.)	High	Acre	\$7.25
313	EQIP	Waste Storage Facility (No.)	Dry Stack	CuFt	\$4.50
313	EQIP	Waste Storage Facility (No.)	Above/Tidal Tank	CuFt	\$0.42
313	EQIP	Waste Storage Facility (No.)	Above Ground Tank	CuFt	\$0.37
592	EQIP	Feed Management (Ea.)	Dairy Phos Mgt	AU	\$38.69
430DD	EQIP	Pipeline(Ft.)	14 – 24 Inch	DiamInFt	\$5.85
430DD	EQIP	Pipeline (Ft.)	2 – 12 Inch	DiamInFt	\$1.87