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Subpart A – General Information

600.00 Introduction

A. Background

(1) NRCS financial assistance programs authorize NRCS to base program payments upon NRCS determination of incurred costs and income foregone associated with practice implementation. This authority affords the agency the ability to:
   (i) Justify program payments to assure compliance with World Trade Organization (WTO) treaties and agreements;
   (ii) Make payments for certified practices based upon NRCS determination of cost estimates without need to collect receipts or verify actual cost; and
   (iii) Document costs for typical practice application in payment schedules.

(2) Beginning fiscal year 2009, the agency has utilized payment schedules to document cost of practice implementation, and provide public transparency in determination of payment rates to support certain program payments administered through ProTracts contracting software. The methods for development of payment schedules must include assurances that payments meet program authority, reduce potential for improper payments, provide adequate financial assistance to encourage adoption of practices, and other positive benefits.

(3) The agency methodology described in this handbook and the process used to develop payment schedules achieve the following:
   (i) Provide transparency and timely payment rate information to program applicants and agency partners.
   (ii) Ensure that payment schedules are consistent with program authority.
   (iii) Provide a consistent, reliable, and defensible method for documenting eligible costs.
   (iv) Provide flexibility that reflects cost variation across the Nation.
   (v) Use established and accepted economic geographic areas aligned with States and regions based on farm employment data, crop costs, and other economic factors.
   (vi) Ensure payment rates and financial assistance are consistent with the definition, purpose, and requirements of approved conservation practice technical standards.
   (vii) Provide for simplification of program application, contract administration, and program payments.
   (viii) Support agency efforts to reduce State and field staff workload allowing more time for conservation planning, technical assistance (TA), and practice implementation.

B. National-Regional Process
The process of determining the estimated incurred costs for individual conservation practice standard implementation is an iterative review process between national and regional teams. This process is briefly explained below.

(i) Payment schedule development begins at the national level based on the Conservation Practice Standards (CPS).

(ii) Regional teams have been established to adjust the nationally developed payment schedules based on local conditions.

- The geographic areas represented by regional teams were established based upon slightly modified Economic Research Service Farm Production Regions as shown in Figure 2.
- The Pacific Islands (Hawaii), Alaska, and Caribbean (Puerto Rico and Virgin Islands) areas are considered separate regions for development of payment schedules.

Figure 2.

600.01 Authority

A. Legislative Authorities:

1. Legislative authorities for the guidance and procedures contained in this handbook, are codified at 16 U.S.C. section 3801 et seq. and 7 USC section 524(b) and include the following programs:

   (i) The Agricultural Management Assistance Program
   (ii) The Conservation Stewardship Program
   (iii) The Environmental Quality Incentives Program
   (iv) The Regional Conservation Partnership Program
(2) Additionally, other NRCS conservation programs may utilize the guidance and procedures contained in this handbook.

B. Regulatory Authorities:

(1) Regulatory authorities for the guidance and procedures contained in this handbook are as follows:
   (ii) Federal Regulation found at:
        - 7 C.F.R. Part 1470 – Conservation Stewardship Program
        - 7 C.F.R. Part 1466 – Environmental Quality Incentives Program
        - 7 C.F.R. Part 1465 – Agricultural Management Assistance
        - 7 C.F.R. Part 652 – Technical Service Provider Assistance

C. Policy Authorities:

(1) Specific policy for administration of payment schedules is in the following directives:
   (i) Title 440, Conservation Programs Manual (CPM), Part 502, “Definitions”
   (ii) Title 440, Conservation Programs Manual (CPM), Part 512, “Conservation Program Contracting”
   (iii) Title 440, Conservation Programs Manual (CPM), Part 515, “Environmental Quality Incentives Program”
   (iv) Title 440, Conservation Programs Manual (CPM), Part 521, “Agricultural Management Assistance”
   (v) Title 130, Agency General, Part 408, “NRCS Electronic Business Tools”
   (vii) Title 440, Conservation Programs Manual (CPM), Part 504, “Technical Service Provider Assistance”
   (viii) Title 440, Conservation Programs Manual (CPM), Part 508, “Conservation Stewardship Program”
   (ix) Title 440, Conservation Programs Manual (CPM), Part 529, “Regional Conservation Partnership Program”

D. Scope

This handbook addresses the methodology, administration, and development of payment schedules for all agency-approved conservation practices or activities that may be financially supported through programs for a specific fiscal year. The handbook also documents the requirements for estimated incurred costs and income foregone associated with implementation of conservation practices in payment schedules administered through ProTracts.

(300-600-H, 1st Ed., Oct 2016)
Note: States may not establish any additional policy or guidance regarding administration or development of program payment schedules.

600.02 NRCS Roles and Responsibilities

A. Chief
   (i) Make policy and program regulatory decisions.
   (ii) Approve the use of income foregone for designated conservation practices.

B. Regional Conservationists
   (1) Provide leadership for the National Payment Schedule Core Team.
   (2) Provide quality assurance to ensure States do not deviate from the regionally developed payment schedules.
   (3) Coordinate payment schedules for landscape scale special initiatives.
   (4) Review requests from States for special considerations that deviate from the process outlined in this handbook.
   (5) Maintain the payment schedule SharePoint site.

C. Deputy Chief for Science and Technology (S&T) and Soil Survey and Resource Assessment
   (i) Provide technical support for the development of payment schedules.
   (ii) Provides oversight for technical quality assurance reviews.

D. Deputy Chief for Programs
   (i) Development, implementation, and policy guidance.
   (ii) Ensures that payment schedules are consistent with program framework.
   (iii) Provides oversight for program quality assurance reviews.

E. Deputy Chief for Strategic Planning and Accountability
   (i) Provide information and technology support for approved payment schedule development and storage software.
   (ii) Approving cost calculation methodologies used to support payment schedules
   (iii) Provide representatives to the Payment Schedule Core Team
   (iv) Provided oversight for the component cost and income foregone quality assurance reviews.

F. Director, Financial Assistance Programs Division
   (i) Overall program evaluation, including program accountability.
   (ii) Recommending policies, regulation content, and establishing supporting procedures.
   (iii) Developing user requirements for program related software, including coordination and involvement with business and information technology specialists on testing, issuing training, and maintaining software to support program activities.

G. National Payment Schedule Core Team
   (1) Membership of the core team, as a minimum, should consist of:
      (300-600-H, 1st Ed., Oct 2016)
(i) Team Leader – Representative from the Regional Conservationist staff
(ii) Two representatives from the S&T Deputy Area – Engineer and Natural Resources Specialist
(iii) A representative from Financial Assistance Programs Division (FAPD) – Natural Resources Specialist
(iv) Two representatives from Resource Economics and Analysis Division (READ) – Economists

(2) Duties include:
(i) Provides leadership and oversight for the development of payment schedules.
(ii) Provides training to other payment schedule support teams.
(iii) Develop guidance to support the payment schedule process.
(iv) Members chair the national payment schedule technical specialists, cost and F1 teams, and PSA software development.

H. National Technical Specialist Team

(1) Membership of the Technical Specialist Teams, as a minimum, must consist of:

(i) A Technical Lead (TL) for each discipline group. Leaders on the National Technical Specialist Teams will be Discipline Leads assigned by the Conservation Engineering Division (CED) and Ecological Science Division (ESD).
(ii) Discipline groups have representatives from National Technology Support Centers (NTSC) and other national technical specialists. Discipline groups will consist of a minimum of three technical representatives.
   • The teams’ makeup will depend on the complexity and diversity of practice implementation across the Nation. Technical discipline groups are as follows:
     1. Agricultural Engineering
     2. Agronomy
     3. Engineering General
     4. Environmental Engineering
     5. Forestry
     6. Range/Pasture Grazing
     7. Water Management Engineering
     8. Wildlife Wetland

(2) Duties include:
(i) Serve as National Scenario Managers (NSM) in the PSA Tool. Refer to Subpart F, PSA User Guide, Exhibit 600.54.
(ii) Determine the number of scenarios available for each practice and enhancement
(iii) Determine whether F1 is applicable for each practice or enhancement
(iv) Review, update, or create national payment schedule scenarios for use by the RSTs.
(v) Evaluate requests by RSTs to add new scenarios, components, and unit types.
(vi) Provide quality assurance review for RSTs’ work.

(300-600-H, 1st Ed., Oct 2016)
(vii) Support development of payment schedules for conservation activity plans (CAP) and enhancements.

I. National Cost Team

(1) Membership of the National Cost Team, as a minimum, must consist of:
   (i) Assigned READ Economist Lead.
   (ii) Other identified personnel as needed.

(2) Duties include:
   (i) Serve as Component Manager (CM) and Price Manager (PM) in the PSA Tool. Refer to PSA User Guide, Exhibit 600.54.
   (ii) Review component requests and consults with S&T and FAPD for consistency, duplication, and appropriations law.
   (iii) Develop cost data for practice components following approval by S&T and concurrence by FAPD. See Section 600.26.
   (iv) Upload component prices and documentation in the PSA Tool.
   (v) Provides quality assurance reviews on cost and FI components.

J. Regional Scenario Team

(1) Membership of RST shall consist of:
   A maximum of three members from each State within the region as assigned by the respective State Conservationists (STC).
   (i) Should be multi-disciplinary and should have access to program and technical expertise to address all practices.
   (ii) Each region has the autonomy to establish operational structure as needed. The teams can determine how often and what type of meetings may be necessary for each region. Regular communications amongst the team is essential.

(2) Duties include:
   (i) Serve as Regional Scenario Managers (RSM) in the PSA Tool. Refer to PSA User Guide, Exhibit 600.54.
   (ii) Coordination with technical specialists to review and update regional payment schedules.
   (iii) Coordinate with other RSTs to develop typical practice scenarios.
   (iv) Coordinate and collaborate within each region to make decisions regarding final regional scenarios.
   (v) Engage the appropriate program and technical experts needed for development, review, and concurrence on regional scenarios.
   (vi) Coordinate with neighboring RSTs to develop consistent payment schedules for cross-regional landscape conservation initiatives (Refer to National Instructions (NI)-440-307, “Instructions for Implementing National Program and Landscape Conservation Initiatives”).

(3) Recommendation. - To facilitate communications and coordinate work tasks, each team should include:
   (i) Team Leader or Coordinator who will:

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• Prepare a work plan for the region.
• Schedule meetings as needed.
• Initiate action when needed by team.
• Insure actions are completed by team on schedule time.
• Report regional team progress.
• Engage line officers if needed to resolve differences.

(ii) Two Team members who will:
• Coordinate requests for additional components, price evaluations, scenario units and limits, etc.
• Upload final regional payment schedules

(iii) If needed a facilitator who will:
• Facilitate consensus on final scenarios and solutions for regional differences.
• Resolve conflicts on difficult issues

K. State Conservationists
   (1) Evaluate recommendations from the State Technical Committees.
   (2) Establish the program payment percentages applied to each cost category.
   (3) Provides representatives for the RST and State Payment Schedule Managers (SPS). State Conservationists should ensure that individuals are selected to equitably represent each State within the region.

L. State Payment Schedule Managers
   (1) A maximum of two members from each State as assigned by the respective State Conservationists.
   (2) Duties include:
      (i) Serve as State Payment Schedule Managers (SPS) in the PSA Tool.
      (ii) Select and approve regional scenarios to be offered within the State.
      (iii) Add State programs
      (iv) Set payment percentages for each scenario by program.
      (v) Release payment rates to consuming applications

M. Designated Conservationists
   (1) Hold local work group meetings and provide feedback to State Representatives.
   (2) Select the payment scenario that most closely resembles the practice implementation when developing NRCS program contracts.

N. State Technical Committees and Local Work Groups (LWG)
   (1) As noted in regulation and policy, NRCS is responsible for administering programs including approving program payment rates. The development of payment schedules to support program payment rates is an inherently governmental technical activity and State Technical Committees and LWG subcommittees do not have a role of reviewing, approving, or concurring in this activity.

(300-600-H, 1st Ed., Oct 2016)
(2) State Technical Committees and LWGs are bodies that provide advice to the State Conservationist as described in 440 CPM, Part 501 “USDA Conservation Program Delivery”. The primary focus and advisory role of these committees and LWGs is identification of local natural resource concerns and priorities that can be addressed through agency provided technical and program assistance.

(3) CPM Part 501.24 (C) notes that committee and LWG recommendations regarding payment schedules are specific to:

(i) Providing recommendations for practices and program payment percentages for conservation programs that support program objectives and State and local priorities.

(ii) Program payment percentages documented in practice payment schedules and maximum payment on conservation practices consistent with program requirements.

(4) Although it is permissible to solicit recommendations as noted above, it is not appropriate for NRCS to share detailed payment schedule cost documentation, scenario details, or cost category information. Decisions by State Conservationists regarding establishment of program payment percentages are described in policy and Sections 600.10 (General Requirements) and 600.11 (Principles of Least Cost) in this guidance document.

600.03 Deadlines – Fiscal Year Implementation Schedule

A. To make program opportunities available to eligible participants at the beginning of any new program year, the agency has established that all activities, procedures, and actions needed to publish final payment rates must be completed by the beginning of each fiscal year – October 1. Therefore, the following generalized schedule provides guidance for completing milestones and actions needed to meet the October 1 deadline for release of approved payment rates.

Note: For approved and announced program opportunities, no new or additional payment schedules, scenarios, or components may be developed or added – program announcement is typically October 1, the beginning of the fiscal year. After a program opportunity is publically announced along with final approved payment rates, no new practices, payment schedules or revised payment rates may be added or approved for the announced program opportunity. In unusual situations as approved by national leadership, new payment schedules and scenarios may be approved after October 1 when a new program opportunity is approved by agency leadership, and only if existing payment schedules do not address the purpose or need of the new program. Development of new payment schedules or scenarios for new mid-year program opportunities must follow established protocol as described in this handbook.

B. Payment Schedule Development Process:
600.04 Business Tool Requirements

Successful development of payment schedules to support each fiscal year program is dependent upon the timely review, update, and management of data in several business tools. Agency staff responsible for these databases must review and update, as applicable the following database or business tool on an annual basis to guarantee successful generation of payment schedules to support financial assistance programs. Although these databases may be updated after the October 1 payment schedule deadline, revised values may not be used to change any previously announced or published payment schedule, payment rate, or scenario.

1. Conservation Practice Standards (CPS) database:
   The CPS database is the official agency registry for approved conservation practices and activities that may be eligible to be supported through program financial assistance. This database also includes the approved lifespan for each practice that may influence the inputs or components used to support the practice, activities, and potential design of practice scenarios. Also see 440 CPM, (300-600-H, 1st Ed., Oct 2016)
Part 512.11(D). New, revised, or interim practices and enhancements that are anticipated to be made available for any program year must be approved and entered into CPS to allow incorporation into the scenario development process.

(2) Practice Average Annual Costs (PAAC) database:
States are responsible for the review and update, as applicable, of the Practice Average Annual Costs (PAAC) database each fiscal year to support the ProTracts Application, Evaluation, and Ranking Tool (AERT). The process to develop payment schedules must be completed to allow States use of data from payment schedules to populate the PAAC before the beginning of any fiscal year.

(3) Payment Schedule Application (PSA)
The PSA facilitates the development, approval, and management of payment schedule scenarios among regions and States for consistency, national oversight, and to meet agency responsibilities to implement program statutory requirements. The PSA is an internal agency Web-based tool accessible by authorized users based on zRoles permissions. The PSA fully integrates the process approved by the agency to generate approved payment rate cost lists used to support the Customer Service Toolkit (CST), contracting software (ProTracts), and other agency business tools. PSA provides oversight to assure adherence to policy, protection of proprietary cost data, tracking of annualized costs, and reports for posting to the Field Office Technical Guide (FOTG) for transparency and public inspection.

600.05 Applicability
Payment schedules are used to document all authorized costs and payment rates used to support applicable authorized programs administered through ProTracts.

Subpart B – Payment Schedule Requirements

600.10 General Policy Requirements

A. Program Neutral Payment Schedules
Only one payment schedule using “program neutral” costs will be developed each fiscal year for approved conservation enhancements and practices offered for each respective program.

B. Program Payment Percentages
For each practice scenario, State Conservationists must establish appropriate program payment percentages for each cost category to create a program-specific payment rate subject to 440 CPM, part 512.33 and the following requirements:

(300-600-H, 1st Ed., Oct 2016)
(i) To the extent possible States should strive for a single payment rate for each practice scenario, unless the following criteria apply:
   a. A different payment rate is necessary to support a specific program or landscape conservation initiative.
   b. A different payment rate is necessary to support significant regional differences within a State.

(ii) State Conservationists should consider the principles of least cost when assigning the program payment percentages, following guidance at 600.11(D).

   Note: Payment percentages under the CSP program are nationally determined.

C. Payment Schedules

   Statutory authority for program payments is to implement practices and enhancements approved in the FOTG that have a purpose and definition to address an identified natural resource concern. Payment schedules must only address the costs associated with a single stand-alone practice and as defined in the CPS planning requirements or conservation activity plan criteria (See also 600.10(F) regarding component payments).

D. Estimated Incurred Costs

   (1) Payment schedules are used to document appropriate estimated incurred costs and FI to arrive at a payment rate for program financial assistance payments. Program legislation requires that program payments be based on the estimated incurred costs and income foregone associated with practice implementation to address a natural resource concern. Authority also includes certain approved planning activities. Program payments are not to reimburse program payments completely for all costs associated with practice implementation.

   (2) To assist in helping applicants and partners understand this authority and process to develop payment rates, several key points should be understood.

   (i) "Cost share" and "incentive payment" authority are not applicable – Discussions with producers and partners regarding program assistance should avoid these terms and instead use “financial assistance payment” or “payment rates”.

   (ii) Producers or partners who request NRCS provide estimates of total practice implementation costs should be informed that the costs estimated through NRCS TA in the conservation planning process is separate from the financial assistance (FA) of the NRCS program. It is not appropriate to use payment schedules as estimated total cost associated with projects since the payment schedule process only includes eligible cost authorized by available programs and omits certain cost such as operation and maintenance, risk, administrative/permits, opportunity costs, etc. (See also 200 NREH, Part 613).

   (iii) NRCS is responsible for providing the applicable payment rates associated with conservation practices. The applicant is responsible for making the final decision whether the program payment will provide sufficient financial assistance to warrant continuing with the application/contract.
(iv) Maximum payment percentages established for programs are not cost-share percentages. These percentages are maximum payment limits applied to estimated incurred cost of practice implementation. Actual cost to the individual landowner/producer is not used for the determination of program payment as cost share is no longer calculated in ProTracts for payment purposes.

(3) Additional guidance regarding details to identify and document appropriate estimated incurred component costs is in section C of this handbook.

E. Cost Categories
(1) For the purpose of cost documentation in payment schedules, only the following cost categories are authorized to be used:
   i. Materials
   ii. Equipment for Installation
   iii. Labor
   iv. Mobilization
   v. Acquisition of Technical Knowledge
   vi. FI
(2) Since payment schedules are not used as a basis to determine total estimated project cost, the following categories are not documented in payment schedules:
   i. Operation and Maintenance
   ii. Risk
   iii. Administrative and Permit Costs
(3) Not all cost categories are appropriate for all practices or programs.
   (i) Refer to section 600.51 for approved cost categories and maximum payment percentages allowed for each conservation practice, enhancement and authorized program.

F. Technical Standards and Lifespan
(1) Conservation practices and enhancements implemented with program financial assistance must meet the technical design criteria of the CPS or activity planning criteria published in the FOTG. Costs documented in the payment schedule must only address those components and activities necessary to implement the practice, enhancement, or activity to address the identified natural resource concern and achieve the conservation objective.
(2) The selection of components needed to implement the conservation practice should also reflect the lifespan assigned to the practice; this is not a requirement that each funded component by itself must meet or last the stated lifespan, rather, the total of all required components together serve to allow the practice to meet the intended lifespan if operated and maintained according to the O&M plan. There may be certain components originally included in the payment schedule that alone cannot meet the lifespan requirement. These items may require replacement or repair according to the O&M plan, and the cost is borne by the participant.

(300-600-H, 1st Ed., Oct 2016)
G. Components and Practices
(1) All program practices, enhancements, and activities paid through ProTracts must meet the technical design requirements of the practice standard to address the resource concern. Meaning that all components and design requirements of the practice must meet the minimum requirements of the standard for all programs except CSP. For CSP, components and design requirements must meet the difference between the minimum requirement of the standard and the enhancement criteria. Payment schedules may not include payments for a stand-alone component or item that does not meet the design requirements of the complete practice. Payment schedules only establish payment rates for the estimated incurred costs associated with practice implementation that are certified as meeting practice standard requirements.

Example: The scenario and payment schedule cannot be developed for the separate component of a fence post, flagging, or gate using the fence practice. The single payment for a post, flagging, or gate described in the scenario does not meet the minimum technical requirements of the fence practice standard.

(2) Note that some authority specific to programs such as AMA, CSP and EQIP include policy that prohibits development of payment schedules and payments for practices or scenarios that are entirely enterprise or production related and do not address a natural resource concern. Payment schedule scenarios must be developed to ensure that the typical resource setting to be addressed by the practice also addresses a natural resource concern and achieves a positive environmental benefit. Practices implemented solely for the purpose to reduce producer costs or other activities simply to increase or facilitate production of commodities or livestock are not appropriate for program support.

H. Payment Scenarios
(1) The payment schedule scenario is a general description of practice application for a typical resource setting.
(i) The payment scenario does:
• Determine the commonly used components and activities associated with a practice
• Assist the field planner to select the most appropriate scenario for the resource setting regardless of the final payment rate.
• Document the estimated incurred costs, Fl, and the most applicable typical payment rate.
• Broadly approximate the typical application of a practice to address a resource concern in a region or State.
(ii) The payment scenario does not:
• Dictate the technical requirements or design of a practice.
• Represent application of a practice for a geographical area less than that of a State.

(300-600-H, 1st Ed., Oct 2016)
• Develop a description of every situation that may exist where the practice is applied.

(2) The scenario is initially established by national technical leads for each practice, enhancement, or activity to address common application for typical resource settings. The national process also provides opportunity for regional teams (RSM) to modify or add additional scenarios needed to address typical practice application that is not addressed in nationally approved scenarios. Note: For fiscal year 2017, States will not be allowed to modify or add enhancements for CSP consideration.

(3) Nationally approved scenarios are assigned one of four different types of statuses by national technical leads.

• Adoptable – Regional teams may adopt scenarios as written, or use as a template to create a new regional scenario.
• Non-editable – Regional teams may adopt scenarios as written, but may not use as a template to create new scenarios.
• Mandatory
  (i) Mandatory-Region. National scenarios are automatically assigned to all regions. States will have the option to determine which scenarios will be made available for financial assistance.
  (ii) Mandatory-State. National scenarios are automatically assigned to all regions and States. For example CAPs.

(4) At a minimum, the payment schedule scenarios must include:
  (i) Brief description of the location and site setting;
  (ii) Typical installation extent (acres, square feet, etc.);
  (iii) At least one natural resource concern to be addressed; and
  (iv) Reference to commonly associated or facilitating practices.

(5) RSMs may develop a new payment schedule to support practices in the following situations:
  (i) The typical practice or enhancement implementation requirements are unique to a region or State.
  (ii) The State has an approved interim practice where a national payment schedule scenario will not be developed.

(6) There may be situations where the resource settings or the typical application of a practice is unique. This situation may require additional scenarios to be developed that represent an area smaller than the established regional geographic area.
  (i) These exceptions will only be considered if all of the following conditions are met:
    • The resource setting requires that additional or unique components (material, labor, equipment, etc.) be considered.
    • The final payment rate is significantly different than what is provided based on the other payment scenarios within the payment schedule.
    • Typical implementation size of the practice is different than neighboring States. Note: Unit size difference does not always mean cost/unit difference.
(ii) The area addressed by a scenario should not represent a geographic area less than the size of a State. A scenario’s resource setting should not be established for specific agricultural or administrative units (farms, ranches, counties, etc.) within State boundaries.

(7) NRCS is currently implementing multiple national and landscape “initiatives” to target and maximize the resource benefits. As these initiatives are not limited to the same regional payment schedule boundaries, it is expected that some additional coordination is required.
   (i) RSMs should coordinate as needed to ensure that each region involved with a specific initiative have the necessary payment schedule scenarios necessary to ensure the success of the initiative.
   (ii) The national initiative coordinators are responsible to ensure the coordination occurs and assist with the development of scenarios as needed to ensure the success of the initiative.

(8) The maximum number of scenarios that may be developed for a specific practice, enhancement, or activity payment schedule is approved by the appropriate national technical lead. RSMs can request the limit on the number of scenarios be increased.

(9) The goal of the agency is to develop the fewest number of scenarios and payment rates needed to implement the program. For decisions on merging scenarios, the general rules or criteria to consider may include the following:
   (i) If two or more practice scenarios are technically similar within the same practice, (use the same or similar components, activities, etc.) except for a minor difference in the quantity or extent, and are 10 percent or less in total cost difference, consideration should be given to scenario merger.
   (ii) If two or more practice scenarios are technically similar within the same practice, use similar components at various sizes or extents to create economies of scale, and are 10 percent or less in total cost difference, consideration should be given to scenario merger.

I. Income Foregone
   In addition to estimated incurred costs of components and activities, program payments may include estimated income foregone costs associated with practice implementation. The process to identify estimated income foregone associated with practice implementation is subject to the same rigorous process and justification for estimated incurred costs. Additional guidance for income foregone is in subpart C of this handbook.

J. Special Program Limitations or Considerations
   Statute and regulation establish that AMA, CSP and EQIP may be used to help implement conservation practices on eligible land. Areas of water that are not associated with a land-based practice are not eligible. Financial assistance may only be used to implement practices, enhancements, or support activities that are land-based. Refer to 440 CPM, part 515.81(E), subpart I and CPM, part 507.00, subpart O.

(300-600-H, 1st Ed., Oct 2016)
Currently there is no statute or regulatory authority to use AMA, CSP, or EQIP program funds to implement practices or enhancements with the standard purpose to “develop renewable energy systems.” No practice or enhancement scenario should be developed for the stand-alone purpose of generating energy or electricity. Any program funded practice, enhancement, or activity must address a purpose related to an approved natural resource concern.

600.11 Principles of Least-Cost

Cost effectiveness is defined in 440 CPM, Part 502, Subpart A “Common Terms”, as the least costly option for achieving a given set of conservation objectives to address an identified natural resource concern. Consideration to achieve least cost must be used during the following activities and methodology used to support development of appropriate payment rates that meet requirements of cost effectiveness:

A. Payment Schedule Components

(1) The selection of components or inputs will be based on what is typically needed to meet the minimum requirements of the practice standard, address the resource concern, and also represent the least-costly alternative. Note: For CSP only, components and design requirements must meet the difference between the minimum requirement of the standard and the enhancement criteria.

(i) The concept of least cost should be considered first by the technical discipline leads and economists in terms of the specific components and activities that are required for each specific scenario.

(ii) Least cost components are determined by:

- The minimum technical requirements to implement a practice to resolve a resource concern.
- The expected lifespan of the practice that is properly operated and maintained.
- Historical experience – If agency staff determines the use of a cheaper component prevents the practice from meeting its expected lifespan, then a more costly component is justified.

(2) The principle of least cost should not be applied as criteria to limit the number of scenarios developed to address typical resource settings. Each scenario stands on its own merits without comparison in terms of least cost. The payment scenario and associated estimated costs are developed independently of each other to establish an appropriately documented payment rate (payment amount per unit).

Example: An engineer and economist consider the least cost pipe component that is typically needed to meet the minimum requirements of an irrigation related practice scenario. There would be no need to include the estimated cost for using a steel pipeline component when a PVC pipeline component will suffice to meet the

(300-600-H, 1st Ed., Oct 2016)
minimum technical requirements of the practice standard, conservation need, and will be operated and maintained for the expected practice lifespan. However, if the design engineer determines that based on geographical or typical site specific conditions that the standard can only be met using steel pipe, it would be appropriate to develop a scenario containing a steel pipe component.

B. Payment Percentages
Agency policy establishes requirements for assigning program payment percentages associated with each authorized cost category. For certain nationally established program opportunities that need to be offered consistently throughout the Nation, payment percentages may be established through guidance for specific practices, enhancements, activities or initiatives. For all other situations, the Chief delegates authority to the State Conservationist, with input from State Technical Committees, to set the payment percentage for each program within each State and payment schedule. The selection of an appropriate payment percentage should also consider the minimum or least-costly percentage needed to encourage participation in the program. Refer to 440 CPM, Part 512, Subpart D “Program Payment Schedules”.

Example: Based upon input from the State Technical Committee and agency partners, a State Conservationist may establish for a specific practice a maximum payment percentage of 60 percent to encourage adoption of the practice and adequate participation in the program. This percent represents the least-cost principle to establish a reasonable payment rate for each financially supported practice to encourage program participation.

C. Small Scale and Historically Underserved Producer Considerations
(1) Outreach is an integral part of the overall delivery of NRCS programs and services to customers and potential beneficiaries. NRCS will conduct business to ensure that all programs and services are made equally accessible to all customers, with emphasis on assisting historically underserved (HU). NRCS will identify opportunities and barriers to successful outreach.
(2) Development of least-cost alternatives that also consider the needs of small scale or HU producers will provide opportunities to reduce negative impacts.
(3) When developing practice scenarios, consideration should be given for typical situations associated with small scale or HU producers. Considerations may include:
   a. The typical extent of the practice that is implemented to address a resource concern. Practice scenarios that only consider extremely large or small extents may not provide adequate payment rates.
   b. The typical components (such as the types of material or labor) used to implement the practice.
Refer to 440 CPM, Part 512, Subpart C “Application for Assistance”, for other agency actions and program contract functions related to the concept of applying least-cost.
600.12 Conservation Activity Plans

A “conservation activity plan” (CAP) is defined as the conservation practice associated with the development of an approved conservation plan by a certified Technical Service Provider (TSP) for payments to be made directly to EQIP participants. Payment schedules supporting conservation activity plans are subject to the following:

1. CAPs may only be supported or developed through EQIP.
2. CAPs may only be developed by TSPs that are certified and approved through the national registry located at: http://techreg.sc.egov.usda.gov/CustLocateTSP.aspx.
3. The criteria and deliverables associated with CAPs are the nationally established planning criteria published to the FOTG. The planning requirements for development of a CAP may not be modified or amended by States.

A. The cost basis for development of payment schedules to support CAP financial assistance is subject to the following:
   1. The only payment schedule cost category approved for CAPs is:
      i. Labor
   2. The following cost categories may not be used to develop CAP payment rates:
      i. Materials
      ii. Equipment for Installation
      iii. Acquisition of Technical Knowledge
      iv. Mobilization
      v. Foregone Income (FI)
   3. CAP payment rates are subject to the same maximum payment limitations as noted in 440 CPM 512.33 and program payment percentages will be established through the national process. State Conservationists will not establish program payment percentages for CAPs, nor will payment rates be “capped” or subject to a “not-to-exceed” maximum payment.
   4. The inclusion of costs associated with travel expenses (hotel, mileage, etc.) for TSPs services, nor reimbursement of time or labor contributed by the contract participant, are not to be included in a CAP payment schedule.

B. Payment schedules to support CAP payment rates will reflect estimated incurred costs based upon a national or regional geographic area.

600.13 Enhancements, Suites of Enhancements and Practices

A. Enhancements are designed to address a specific conservation practice standard’s additional criteria or consideration for a specific resource concern and cause (i.e., purpose). For example, cover crops to reduce water erosion addresses the purpose soil erosion – sheet and rill erosion. Additionally, enhancements do not include the base or general criteria requirement from the conservation practice standard. The general criteria requirement for a standard and purpose must be met independent of the enhancement criteria. Refer to 7 CFR 1470.

1. Components for enhancement scenarios are limited to those actions required to meet an enhancement’s criteria that are above and beyond those components
that would be used for a typical practice scenario for the same purpose. Components required to meet a typical practice scenario purpose are not included in enhancement scenarios.

2. Payment schedules to support enhancement payments will reflect local conditions thru the use of State cost factors.

3. Enhancement payment schedules will utilize a national template and will not be reviewed by regional teams for fiscal year 2017.

4. Quality assurance review of enhancement scenario components will be performed nationally.

5. Payment schedules for enhancements affect the additional and supplemental activity payment in CSP.

B. Suites of enhancements (i.e., Bundles) are designed nationally to coordinate the installation and adoption of enhancements with each other to address resource concerns in a more comprehensive and cost-effective manner. These suite of enhancements provide greater environmental benefits when implemented in conjunction with one another.

1. A bundle scenario includes all the scenario components from the individual enhancements used to make the bundle except for those components that are duplicative.

2. Payment schedules to support bundle payments will reflect local conditions through the use of State cost factors.

3. Bundle payment schedules will utilize a national template and will not be reviewed by regional teams for fiscal year 2017.

4. Quality assurance review of bundle scenario components will be performed nationally.

5. Payment schedules for bundles only affect the additional activity payment in CSP.

C. Payment schedules supporting enhancements or bundles are subject to the following:

1. May only be supported or developed through CSP.

2. May only have one scenario per enhancement or bundle.

3. The regionalization of payment schedules will be accomplished by using the State costs of components.

D. The cost basis for development of payment schedules scenarios to support enhancements or bundles is subject to the following:

1. Labor
2. Acquisition of Technical Knowledge
3. Materials
4. Equipment for Installation
5. Mobilization
6. Foregone Income

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E. The payment schedule scenario will have the following payment percentage factors:
   1. Enhancements equal 100 percent
   2. Bundles equal 115 percent
   3. Practices equal 10 percent or a factor determined by the Chief.

   Note: For CSP only, there is no increased payment percentage for HU participants.

F. Payment schedule scenarios for supplemental payments (i.e., resource conserving crop rotation and improved resource conserving crop rotation) must be at a rate not to exceed $15 and $5 per acre, respectively. Rates are determined by the Chief.

G. Conservation practices (i.e., practices) are defined in 7 CFR 1470. Practices are used to address a specific conservation practice standard’s general criteria for a specific purpose. Practice scenario development for CSP will leverage existing practice scenarios developed for other financial assistance programs by labelling for CSP. The following criteria provide guidance when selecting CSP appropriate practice scenarios:
   1. For management practice (1 year lifespan), select the scenario closest to the base practice requirement.
   2. For structural or vegetative practice (>1 year lifespan), use discretion when selecting one or more scenarios.
   3. In all cases, the practice scenario selected must not be duplicative with the enhancement scenarios.

600.14 Proposed Enhancements

An enhancement proposal must follow the vetting and coding process as specified in 440 CPM 507, subpart H before the subsequent payment scenario can be developed. Therefore, follow the specified process to obtain an approved and cleared enhancement before starting the payment scenario development.

600.15 Cost Lists

A. States must ensure that all cost lists are created in the payment schedule application (PSA) tool and electronically transmitted into contracting software (ProTracts) and customer service toolkit.

(1) A cost list consists of conservation practices, enhancements, and activities (with applicable components) that identifies unit costs or payment rates for a geographic area. Note: Component(s) identified in the cost list template are the same as the typical scenario name(s) created in PSA.

(i) A separate (i.e., new) cost list should be developed for:
   - Different percentage rates for programs or initiatives
   - A new program opportunity (i.e., special funding pool) is approved by agency leadership. In unusual situations, new payment schedules and scenarios may be approved after October 1 when a new program

(300-600-H, 1st Ed., Oct 2016)
opportunity is approved by agency leadership, and only if existing payment schedules do not address the purpose or need of the new program.

Note: Each cost list electronically transmitted into ProTracts must include HU and traditional participant payment rates, except CSP (Refer to 600.13(E). Payment rates for HU items must be prefaced with “HU” in the cost list to comply with new software controls for applicable participant types during contracting and quality assurance.

(ii) A separate cost list should not be developed for:
- Separation of regular and HU payment rates
  Each cost list uploaded into ProTracts must include HU and traditional participant payment rates. Payment rates for HU items are prefaced with “HU” in the cost list to comply with new software controls for applicable participant types during contracting and quality assurance.
  Note: The PSA Tool is designed to generate all cost lists with both payment rates consolidated for all programs, excluding CSP. For CSP only, there is no increased payment percentage for HU participants.
- A specific group, practice, resource concern, or location
- Same percentage rate for initiatives. Note: Some practice scenarios are not applicable for a certain initiative, but have the same percentage rate. States have autonomy to develop a user’s guide or practice matrix.
- Only CAPs

Subpart C – Developing Cost Data

600.20 Introduction

A. The cost data documented in payment schedules is critical for developing appropriate payment rates to support NRCS programs. Cost data documented in payment schedules must meet the following criteria:
1. Necessary to ensure the purpose, definition, and technical requirements of the conservation practice standards, activity, and enhancement criteria to be met.
2. Support the implementation of a conservation practice, enhancement, or activity based on the typical scenarios that address resource concerns in common resource settings
3. Consolidated data that reflects national, regional, or State geographic areas
4. Based on credible sources that offer estimates of incurred costs
5. Are appropriate based on program authority and purposes
6. Represent the least-cost component as determined by section 600.11 and 600.13.

B. Payment schedule components will be reviewed annually and updated by the national cost team if there is a significant increase or decrease in estimated costs. A component cost review can be initiated using one of three methods:

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i. PSA automated price review. Component prices are rated at the time they are entered into the PSA system. An integral part of this rating system is the date of the data source. Regardless of all other rating factors, if a component price has not been updated within 3 years, PSA will automatically initiate a price review.

ii. A component price reconsideration on any component may be submitted by the RSMs or NSMs within the PSA system.

iii. The National Cost Team may initiate an independent price review on any component or category of components.

C. Although cost data was previously based upon receipts, invoices, and local evidence of actual cost of practice implementation, the current authority for developing cost data supports a methodology that estimates costs. The new methodology substantially reduces the workload associated with collecting specific actual cost data and substitute’s a methodology that allows the use of consolidated data sources, nationally accepted database sources, and other resources that can be readily accessed.

D. The new authority eliminates any methodology or need to approximate a payment rate based upon actual cost of implementation or a perceived payment to encourage program participation.

E. Costs documented in payment schedules must not be based upon a predetermined or desired payment rate, goal, or target amount, including historical perceptions of the amount of payment needed to provide incentive to participate each fiscal year.

600.21 Geographic Area Considerations

A. NRCS determined that payment schedules and associated payment rates will be based upon an ideal target resource setting representing a national or regional geographic area.

B. Regional geographic areas as described in this handbook in figure 2 are at subpart A, part 600.00(B). These regions were established to:
   (i) Increase payment consistency.
   (ii) Use common resource settings, economics considerations, and similar practices as neighboring States.

600.22 Accepted Data Sources

A. General Information and Responsibility of Data Integrity
   (1) The national payment schedule core team and NCT is responsible for determination of the appropriate data sources that will be used to support component costs in payment schedules. The technical leads and regional teams are tasked with identification of components that must be appropriate to a conservation practice standard; the cost data team will then establish the most appropriate representative data source that will be associated with the component.

   (300-600-H, 1st Ed., Oct 2016)
(2) All data sources used by NCT and the rationale for making the decision are documented to provide justification consistent with program authority and to assure compliance with World Trade Organization (WTO) trade agreements.

B. Principles for Data Source Evaluation

(1) NCT employs three guiding principles for developing component price data:
   (i) Reliability and credibility,
   (ii) Consistency, and
   (iii) Efficiency.

(2) Reliability and Credibility means that:
   (i) For compiled data, the data sources must be credible. Data compilation follows sound methodology.
   (ii) For market cost data, large national vendors are preferred over small local vendors.
   (iii) Data description must match the definition of the component exactly. If not, some adjustments to the data may be needed.
   (iv) The data needs to be recent enough; within 1 year is the typical goal.
   (v) If the reliability and credibility of the data end up not being very high, the average of several data sources may be used.

(3) Consistency means that:
   (i) Cross-State consistency: For the same component, data source and calculations for average State prices have to be the same or very similar for all States.
   (ii) Cross-component consistency: Data sources for similar components need to be the same or very similar.
   (iii) Cross-time consistency: There is the need to consider time consistency which means that for the same component, data sources needs to be relatively stable and consistent.

(4) Efficiency means that:
   (i) When multiple methods meeting the same reliability, credibility, and consistency requirements, price data should be collected with the least amount of time and effort. As such, higher priority is given to data sources that have State average data already developed or can be readily computed and is applicable to the component cost being calculated.
   (ii) Indexes may be used to estimate State prices from national averages or single State prices instead of collecting price data by State for the same component, if such data doesn’t already exist or can be easily calculated from other sources.

C. Protection of PII or Proprietary Data

(1) The agency is responsible for protecting individual personally identifiable information (PII) that may include sensitive information such as tax identification numbers, bank account numbers, social security numbers, etc. Legislation, departmental guidance, and policy all establish privacy rights for internal and external agency customers. Certain information could be releasable or withheld...
through provisions of the Freedom of Information Act (FOIA). Proprietary data provided by vendors or private companies may be protected by trademark or patent laws.

(2) Applicable references regarding PII or proprietary cost data used by NRCS could be subject to any of the following:
   (i) Freedom of Information Act (FOIA)
   (iii) 120 GM, Part 408, Subpart C.
   (iv) 440 CPM, Part 512, Subpart D
   (v) NRCS FOIA Web site
   (vi) NRCS Privacy Web site

(3) The NCT will take action as needed to protect known proprietary data used to document component costs. Databases containing raw data will be protected by access except for members of the core or cost teams, and any data that will be released for public transparency will be sanitized to remove reference to sensitive source information that may be PII or proprietary. Requests to access or download the cost team working database to unauthorized staff will not be approved.

D. NCT will classify data sources into five broad categories:

(1) Nationally published data sources (public and private). Examples of this category include Department of Labor (DOL) Wage Rates by Occupation, National Agricultural Statistics Service (NASS) price paid data, Economic Research Service (ERS) crop budgets, American Society of Agricultural and Biological Engineers (ASABE) Agricultural Machinery Management (i.e., machinery cost calculators), and Land-Grant University Extension publications.

(2) National commercial databases. An example of this data category is RSMeans CostWorks ©. (Proprietary data – Not Releasable).

(3) National vendors. These are usually large suppliers with national distribution channels that sell their products nationally on the web with the same prices. An example of this data category is fencing material suppliers. (Proprietary data – Not Releasable).

(4) State/local vendors and other data sources. This category includes smaller suppliers with State or local distribution channels. It also includes data from State or local extension services and other State or local data providers. (Local Proprietary data – Not Releasable).

(5) Past State payment schedule price data. The price data from past payment schedules is a unique data source that may sometimes provide data that could not be found efficiently elsewhere with sufficient accuracy and consistency. For example, the average State prices for central pivot irrigation system components are unique and may be difficult to find. However, the components have been well studied by NRCS specialists and documented in the past payment schedules.
(6) In general, NCT prefers the use of national data sources in the first three categories over the State and local data in the last two categories for the overall advantage of the former:
   (i) Better consistency and efficiency by definition.
   (ii) Better reliability, credibility, and documentation for estimation.
(7) State and local data may be useful in situations where quality national data sources are not available.
(8) Multiple data sources are preferred if available. However, one data source is acceptable. For example, as new technology becomes available for producers to acquire technical and financial assistance, the number of vendors may be limited to the public.

Note: Sources of data using “actual cost” such as bills, invoices, and receipts are not used for cost documentation unless no other data source is available.

600.23 Cost Category Guidance

Detailed cost category guidance for practices supported by payment schedules are in Subpart F – Exhibits, 600.51.

A. Materials
(1) Materials are components used to make, develop, or implement a practice; such as sand, gravel, grass seed, soil amendments, plants, pipe, concrete, sensors, required water measurement devices, and similar products and devices cited as needed in the practice standard. Costs associated with signage or safety requirements cited in the practice standard to address the resource concern(s) may be included as eligible costs.
(2) Costs associated with the expense of materials typically needed to implement a conservation practice are recorded in the “materials” cost category of the payment schedules.

B. Equipment for Installation
(1) Equipment/installation includes the costs associated with tools, machinery, or similar items needed to implement the practice to design standards.
   (i) These costs may consider the expense of equipment based on whether it is owned, rented, or hired when used while implementing or installing a conservation practice.
   (ii) The total estimated expense for equipment services also may include the labor costs associated with operating the equipment while implementing or installing a conservation practice.
(2) Equipment for Installation costs may not include:
   (i) Costs associated with mobilization.
   (ii) Cost to purchase equipment used to install conservation practices.
(3) Equipment for installation cost category does not include components specified by the practice standard that are an integral part of the practice. Examples include: moisture sensors or weather stations needed to implement irrigation water management (449) – these costs should be recorded as material costs.

(4) Costs associated with the expense of equipment (owned, rented, or hired) typically needed to implement a conservation practice are recorded in the “equipment/installation” cost category of the payment schedule.

Note: Costs associated with the purchase of equipment or personal property is prohibited. Personal property includes equipment, supplies, fuel for vehicles, vehicles, pens, chairs, desks, and any other tangible property. Refer to 440 CPM, Part 503.3, Subpart A, “Restrictions on CCC Funds”.

C. Labor

(1) Labor includes the costs associated with the time needed for workers to physically install a practice.

(i) Labor rates may vary depending on the skill level required or degree of difficulty associated with installing a practice. This rate may include certain limited labor costs associated with specialized wage earners, such as supervisory personnel, safety workers, inspectors, or specialists that are typically needed.

(2) This cost category should not include labor associated with conservation planning, design of the practice, payment certification, administrative expenses, or other costs not directly related to installation of the practice. Labor should not include expenses associated with travel costs; however, additional labor time may be added for situations where practices are typically implemented in remote locations.

(3) Labor occasionally will be included in other cost categories for calculation purposes or when available cost data already includes labor as an embedded cost, such as equipment/installation; therefore it is important to make sure this cost is not “duplicated” in other cost categories.

(4) Costs associated with the expense of labor (self or hired) typically needed to implement a conservation practice are recorded in the “labor” cost category of the payment schedule.

D. Mobilization

(1) Mobilization costs are limited to the costs associated with hauling equipment or materials, including loading, unloading, time and labor costs.

(2) This component is most commonly associated with practices located in remote areas.

(3) This mobilization does not include costs associated with:

(i) Fuel, purchase of equipment, travel permit costs, inspection fees, license costs, toll road fees, or other administrative costs.

(ii) Providing access to the worksite such as temporary roads, bridges, or trails.

(4) Costs associated with the typical expense of moving large equipment or materials to and from remote sites where a practice is to be implemented are recorded in the “mobilization” cost category of the payment schedule.

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E. Acquisition of Technical Knowledge

(1) Acquisition of technical knowledge includes the costs for services from other than TA provided by NRCS or a TSP.

(2) Expenses must be directly tied to the requirements of the practice standard or design criteria AND necessary to properly implement, operate or maintain the practice.

**Note:** This category does not include the cost of labor to implement, operate or maintain the practice.

(3) Acquisition of technical knowledge may include the cost associated with:
   (i) Course or workshop the participant must attend to gain the knowledge or training to implement the practice.
   (ii) Service providers providing training or activities directly needed to help implement a practice (e.g. Cost of a consultant to prepare or provide guidance for application of pesticides or irrigation scheduling information, etc.)

**Note:** CAPs and TA services using 100 and 900 series practice codes in program contracts must be completed by a certified TSP.

(4) Acquisition of technical knowledge may **not** include costs associated with:
   (i) Self-taught courses such as DVDs, software, books, reading trade materials, etc.
   (ii) Costs associated with “how to plan.”
   (iii) Expenses associated with record keeping, scouting, etc. are considered labor costs.
   (iv) TSP costs associated with TA payments.
   (v) Travel related expenses (vehicle rental, transportation costs, meals, etc.).

(5) Costs associated with expense for training the participant, services from TSPs, or consultants are recorded in the “acquisition of technical knowledge” cost category of the payment schedule.

F. Foregone Income – Guiding Principles in Calculating Foregone Income

(1) **Background**
   (i) Policy for financial assistance (FA) is based upon the estimated incurred costs (i.e., planning, design, materials, equipment, installation, labor, management, or training) for implementing conservation practices, as well as income foregone by the producer for only designated conservation practices approved by the agency in the “Practice Definition, Purpose, Lifespan, Cost Categories” document. Refer to sections 600.10, 600.25(A) and 600.51.
   (ii) NRCS calculates foregone income as the average annual net income ($/unit/year) lost from implementing a conservation practice that results in a change in land use or land taken out of production associated with the adoption of a conservation practice. **Note:** Foregone Income is a one-time cost not the estimated loss over the lifespan of the practice. Refer to Section 600.52, “Foregone Income Calculations”.

(300-600-H, 1st Ed., Oct 2016)
(iii) Foregone Income (FI) will not include losses of income due to disaster or other events unrelated to the conservation practice such as risk associated with agricultural production. Refer to section 600.25(A).

(2) Baseline Net Income Considerations

(i) FI is a quantifiable measure of the amount of lost income between a producer’s “baseline net income and reduced net income amount” as a result of the adoption of an approved conservation practice.

(ii) The “baseline net income” considers non-Federal program supported income and cost streams associated with crop and animal production over a defined historical period. NRCS current methodology uses a 5-year average return or best available data of commodities affected. **Note: The baseline net income does not consider the impact of the conservation practice on future expected income and cost streams.**

(iii) The calculation of FI uses economic principles centered on baseline “typical” production practices, motivation of conservation practice adoption, and other factors influencing the producer’s decision to depart from baseline conditions.

(3) Special Considerations with Respect to Calculating Foregone Income

(i) **Purpose** - FI calculations are only considered as a result of the adoption of a conservation practice by the landowner, which must be associated with environmental benefits. Confusion can arise because changes in net return can result from a wide range of factors influencing the landowner’s land use and crop/livestock enterprise management strategies. These factors may include:

- Economic decisions (higher expected prices for one crop over others).
- Marketing decisions (shift away from conventional to organic production).
- Strategic decisions (to participate in Government commodity programs to maintain production base for certain crops).
- Best agronomic practices (to adopt crop rotations that maximize long-term production goals).
- Compliance with environmental requirements (delayed harvesting to protect threatened and endangered species).
- Other factors related to historical land stewardship decisions and “real-time” site-specific conditions.

(ii) **Quality of Land Importance** - Crop and forage production budgets used to construct the “baseline net income” assume that the land is productive and employed fully in commercial pursuit. This reason may not be the case for some field border or riparian areas. In such cases, the “baseline net income” assumptions may need to reflect those more typical situations (Example: 30-percent yield reduction for field borders affecting gross revenue without any adjustments to costs).

**Note:** For additional guidance, refer to technical note, 200-ECN-3.

(300-600-H, 1st Ed., Oct 2016)
600.24 Components

A. A component is a common term used to describe a specific part, input, or activity of a cost category that is typically needed to implement a conservation practice. Various alternatives for practice installation are described using typical scenarios, which are composed of one or more component or variation of the same component(s), but at different amounts. PSA contains many of the components necessary to support existing or establish new scenarios. However, as new practices become available, or technology improves, there may be a need to request new components.

B. Component Request

(1) All component requests are submitted for consideration through the PSA Web tool. Requests for components require submission of justification and other information to allow appropriate review and record of decisions to document the process.

(2) Existing - Components currently available on the national component list may be requested to be added to a practice for scenario development. These requests may originate from RSM with approval by NSM, or originate from an NSM.
   i. Existing components may be removed from practices for scenario development by an NSM or FAPD.
   ii. Existing components may be archived from the component list by request from an NSM or FAPD.

(3) New - The development of new components not on the national component list can be requested by NSMs or RSMs. Components requested by the RSM are forwarded to the NSM for approval. After approved by the NSM, the component is reviewed for program compliance by FAPD and then submitted to the cost team. Considerations to request a new component must address the following:
   i. Is there an existing component that will address the resource concern in a similar manner?
   ii. Is the proposed component representative of the industry or a common cultural practice as dictated by the land use or management?
   iii. Is the proposed component the least cost alternative to meet the planning criteria and the minimum practice standards and specifications needed to address the resource concerns? (Refer to 440 CPM, Part 515, Subpart J). Note: Question does not apply to enhancements.
   iv. Will it address the resource concern that is consistent with the definition, purpose and criteria of the conservation practice standard?

(4) New component requests should contain at a minimum the following as supporting documentation:
   i. A detailed description; including such information as the general purpose, composition, appurtenances needed, typical size, etc.
   ii. Technical requirements/specifications (i.e. ASTM standards, engineering drawings, manufacturer specifications, images/photos etc.).
   iii. Contain a minimum of one reference to a verifiable vendor/supplier that is current within 1 year. Refer to section 600.22.

(300-600-H, 1st Ed., Oct 2016)
(5) Requests for new components received after approval of payment schedules and program announcement must wait to be considered in the following cycle for development of payment schedules, typically the following fiscal year.

(6) Reconsideration - RSMs can ask for decisions by NSM to be reconsidered by the technical lead (TL) of that discipline group.
   i. Reconsiderations are limited to a single request per component denial. A justification will be provided for requests denied.
   ii. RSMs should include all pertinent information necessary for the TL to make a final decision.
   iii. Decisions by the TL are final.

(7) The NSM should consider the potential need for innovative technologies in the technical requirements of the practice when reviewing component requests.
   (i) New methods, components, enhancements, or activities must go through technical and programmatic reviews to confirm the requirements of the practice standard will be met in addition to potential programmatic restrictions. A justification will be provided for requests denied.
   (ii) Merge - If two or more components are technically similar as determined by a national technical specialist, except for a minor difference in cost (10 percent or less), consideration should be given by the national cost team to merge.

600.25 Prohibited Components and Activities

A. Payment schedules may not include certain costs that may be required for practice implementation that are not authorized by the program, appropriation law, or not directly related to costs associated with the practice standard, activity and enhancement criteria (See also subpart B for additional guidance regarding program related limitations). Such expenses include but are not limited to the following:

(1) Fi as a stand-alone single cost element of any payment schedule is prohibited. The exclusion of incurred costs (labor, materials, etc.) commonly used to implement a practice to just provide a Fi payment does not meet the requirements for typical practice implementation nor statute. A stand-alone Fi payment might be considered an “incentive payment” that is not authorized. Refer to section 600.10.

(2) Components or undertakings that are not specifically needed as determined by the CPS, activity or enhancement criteria. Stand-alone components that do not meet the requirements of the CPS, activity or enhancement criteria.

(3) Expense of operation and maintenance: Operation expenses associated with the administration, management, and performance of non-maintenance actions needed to keep the completed practice functioning for the intended purpose and the expected lifespan are not authorized to be included in payment schedules. Maintenance activities and expenses to prevent deterioration of the practice, repair, or replacement costs are not authorized to be included in payment schedules. Costs for operation and maintenance are annual costs that are assumed by program participants as required in the program contract agreement.
(4) Risk: Costs related to the agricultural operation that are unknown, uncertain, and typically based upon the probability of financial loss associated with business operation decisions or market conditions. Examples may include the potential loss of value of a crop due to misapplication of water, fertilizer amendments, or market conditions related to crop prices. These costs related to the risk of the agricultural operation are not authorized to be included in payment schedules. A cost associated with risk is not the same cost authorized in the FI cost category. Although there may be risk associated with implementation of a conservation practice, only estimated incurred costs and income foregone defined in legislation are authorized.

(5) Enterprise Operation Costs: Similar to “Risk”, costs associated with the agricultural operation such as soil amendments, irrigation water to grow a crop, pest and weed control, fuel, inflation, energy or electricity, materials and equipment price changes, or contingency may not be included in payment schedules. Costs for decisions related to choice of crops, changes in the enterprise (i.e., conversion from a conventional to organic operation) may not be included in payment schedules. Costs related to either voluntary or regulatory certifications are not reimbursable. Costs associated with water supply companies or districts, utility connections, building drawings or permit, repair of farm equipment, lubrication, and practice repair are not allowed in payment schedules. See item 7, “Administrative Costs”. Note: Operational costs that are typical for implementing a practice or enhancement may be allowed when the practice or enhancement is addressing a resource concern. Example: Payment rate associated with utilizing a no-till drill when adopting a residue management practice.

(6) Permit and Legal Costs: Program authority and appropriation law does not allow for the reimbursement of expenses associated with obtaining permits, filing of applications, or documentation to meet regulatory requirements. Additional costs disallowed in payment schedules are phone calls, organic certification, legal counsel, building permits, property taxes, and the time of program participants or service providers to complete forms.

(7) Administrative Costs: Expenses associated with overhead and components not directly related to the installation of a conservation practice or enhancement cited in the practice standard or enhancement criteria are not authorized for inclusion in payment schedules. Such expenses typically include, but are not limited to:
   (i) Drinking water or food costs.
   (ii) Communication costs associated with phone, fax, email, etc.
   (iii) Signage not related to safety during or after practice implementation.
   (iv) Cost of signage to advertise a vendor or promote use of a conservation practice.
   (v) Travel costs or expenses of food, hotel, or personal transportation.

(8) Renewable Energy: Expenses for practices, enhancements or components with the sole purpose of generation of energy are prohibited. EQIP is the only program with statutory authority for support of energy “conservation”, which does not include costs associated with components or activities solely for the purpose of generation of energy or electricity. There is no statute or regulatory authority to use AMA, CSP, or
EQIP program funds to implement practices or enhancements for the single purpose of “developing renewable energy systems.” No payment schedule may be developed for funding through these programs for the single purpose of generation of energy or electricity.

B. Practice and program restrictions:
Only certain practices may be allowed to be supported in certain programs. For example, statute authority allow financial support through EQIP for only “land-based” conservation practices; however other programs may allow financial support for practices that are located entirely in water environments. Although payment schedules and payment rates are intended to be “program neutral”, if a scenario is being developed for a specific program and resource setting, consideration should be given to programmatic restrictions which may invalidate or negate the need for development of such a payment schedule. For additional guidance, see also section 600.10(J).

C. Rounding
The PSA tool is currently designed to round the monetary data to the nearest cent, such as $3.45/feet; percentage data to the nearest single digit, such as 78 percent; all other non-monetary values such as component quantities for scenarios to two digits after decimal point. States are not allowed to alter final cost lists created within the PSA tool for electronic transmittal into contracting software (ProTracts) and Customer Service Toolkit. Cost data used to support financial assistance programs and payment schedules may not be the same cost data developed for conservation planning. Conservation planning cost data is developed locally for site-specific analysis and decision-making, while cost data for financial assistance programs is often developed on a broader or even national scale. Refer to 200 NREH, Part 613.21, “Conservation Planning Versus Financial Assistance Programs.”

D. Bundling
Payment schedules may only address the costs associated with a single stand-alone practice and as defined in the practice standard or planning requirements. Payments for other stand-alone practices may not be bundled or included in another stand-alone practice payment schedule (e.g., Pumping Plant (533) may not be included in the payment for irrigation pipeline (430)). The attempt to apply a conservation system through a single payment schedule is not allowed. There are some situations where a practice standard cites the use of another practice standard as a condition of design for implementation. In that situation, this is not considered as bundling practices. Additional exceptions are as follows:

i. If a component item meets the definition and purpose of two different standards and the exact same planning criteria for the item exists in both practice standards, then the item may not be considered “bundling” for payment purposes when applied by either of the two different practices. The choice for which practice to include the
scenario for payment purposes should be based upon which practice is typically or appropriately needed to address the common resource situation.

ii. A component item is not considered “bundling” when a standard refers to criteria in another standard for planning or design purposes, and the component item and design elements alone do not meet the definition, purpose, and minimum technical requirements of the referenced practice standard. These component costs may be included in the payment schedule to implement the primary practice.

Note: Practices may not be “bundled” for AMA and EQIP program payment purposes. Refer to Section 600.13(B), “Suites of Enhancements (i.e., Bundles)” for CSP.

600.26 Component Pricing Methods

A. The methods for developing prices for each component falls into three general categories, dealing with different price and data situations:

(1) National Average - in this situation, all States use the best available national average price data for the component, and there is no need to develop different individual State prices;

(2) Individual State - in this situation, use one or more best available individual State price data with adjustments, if necessary;

(3) Estimated State - in this situation, find best available price for one or more States or national average and estimate prices for other States by price indexes available from existing data sources or developed by the team. In special situations, elaborate studies may be conducted to develop prices for individual components.

B. Price Reconsiderations

1. Existing component prices are periodically reviewed and updated by the national cost team. Price reconsiderations also may be submitted by RSMs or NSMs within PSA to initiate a price review (See PSA User Guide, Exhibit 600.54). Considerations when requesting a component price reconsideration are:

   i. Is the price reconsideration based on the typical size, unit, configuration, material, or group type necessary to address the resource concern?
   
   ii. Is the cost reconsideration based on a representative industry average or majority and not an isolated brand or vendor associated cost?

   iii. Is the price reconsideration the least cost alternative to meet the planning criteria and the minimum practice standards and specifications needed to address the resource concerns? (Refer to 440 CPM, Part 515, Subpart J).

   Note: Question does not apply to enhancements.

   iv. Contain a minimum of one reference to a verifiable vendor/supplier that is current within 1 year.

(300-600-H, 1st Ed., Oct 2016)
Component Price Flow Chart

National Cost Team → Technical Discipline Lead

Component Prices developed by the National Cost Team

- National Average
- Estimated State
- Individual States

State Index Table

NASS Prices Paid Index

Component Prices by State

Component List

Component/Practice Table - Technical Discipline Lead

Component by Practice

BLUE - Input files or calculated data used for the development of component prices.
RED - output to PSA for scenario development.

(300-600-H, 1st Ed., Oct 2016)
600.27 Unit for Payment

A. The unit for making a payment is used for a specified conservation practice, enhancement, or activity scenario. Different scenarios within the same practice may have different units. Units are not required to be the same as the national practice standard units and may vary from payment, planning, and reporting units. Units should be the most logical to achieve the practice purpose and in the simplest unit for establishing payment rates. Examples include acres, animal units, feet, number, or cubic yards.

(1) More than one scenario may be described for a practice or activity to reflect different conditions such as variations in economies of scale (i.e., large, medium, small animal waste storage structure), alternative materials, significant equipment, or labor costs that exist within the area covered by the payment schedule.

(2) RSMs can request a change in the allowable units from the NSM discipline group.

Subpart D – Payment Schedule Methodology

600.30 General Description – Methodology Process

A. Flow Chart

(300-600-H, 1st Ed., Oct 2016)
600.31 Payment Schedule Scenarios

A. A well written scenario is based on the conservation practice standard. A scenario cannot describe activities that are outside of the standard. The scenario should describe the geographical area, typical resource setting, and natural resource concerns to be addressed. It establishes the logic behind the use of the practice or enhancement to address the resource concerns, and determines the components and activities allowed in the practice standard to meet planning criteria. The typical scenario documents the authority for the final payment rate that meets program rules. The process justifies program payments based on an accurate, logical and complete scenario description.

B. National technical specialists and RSMs must complete payment schedule scenario required fields by filling in the designated space or selecting a value.

1. Name – The name associated with each scenario and identified as a “component” in the final cost list created in PSA. For consistency in naming scenarios, national technical specialists and RSMs should use the following guidance:
   i. Names should contain a brief description to distinguish between scenarios for selection of appropriate payment rate to support the practice or activity.
   ii. Do not include the practice, activity, subaccount, initiative, or program name within the description.

(300-600-H, 1st Ed., Oct 2016)
iii. Names should be phrased from general to specific and separated by a comma when necessary.
iv. Avoid using uncommon abbreviations. It is important to provide adequate explanation for the intended audience. Information is used by conservation planners and contract developers, and viewed by program participants. Refer to 440 CPM, Part 502, Section 502.10, “Acronyms”.
v. Do not duplicate symbols in the scenario or spreadsheet names. Example 6”<UO>12”
vi. Examples of an appropriate scenario is “Barbed wire, Multi-strand”.

2. Region – The area covered by the scenario.

3. State – The State’s price (i.e., Illinois) is associated with the scenario being created. All scenarios are available within the region for adoption unless specified by national guidance. Prices also will be converted to reflect the appropriate state.

4. Unit – Refer to Section 600.27, “Unit for Payment”.

5. Feature Measure - The feature measure identifies what part of the practice is measured to determine the payment rate. For example, a terrace has a measurement unit of cubic yards; however, this information doesn’t clearly explain what cubic yards to measure (excavated, terrace volume, or both).

6. Scenario Typical Size - The size of the practice that the scenario is based upon. The total cost of the typical scenario is divided by this number to determine the cost per unit.

7. Description – Describes the key features of the scenario. Refer to section 600.10(H).

8. Before Practice Situation – Identifies the resource setting and the typical resource concern that represents a significant problem in a State or region, and is likely to be addressed through the implementation of conservation practices or activities by producers according to NRCS technical standards.

9. After Practice Situation – Defines the typical size and how the practice is typically installed. If the practice in the scenario is typically installed or associated with other practices to function properly and completely meet planning criteria, list these other practices as “associated practices”. Note: The listing of these additional practices is to establish that these activities are not included in the costs associated with the practice scenario. Refer to section 600.25(D).

C. Cost Summary - Sum of cost categories for a single practice or activity type. The total practice cost constitutes the NRCS estimate of how much it will typically cost to implement
a conservation practice or activity. Total Implementation Cost = (Materials + Equipment/Installation + Mobilization + Acquisition of Technical Knowledge + Foregone Income).

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Number</th>
<th>Name</th>
<th>Unit</th>
<th>Qty</th>
<th>Price</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Installation</td>
<td>934</td>
<td>Auger Post driver attachment</td>
<td>Hour</td>
<td>5</td>
<td>$7.37</td>
<td>$36.85</td>
</tr>
<tr>
<td>Equipment Installation</td>
<td>939</td>
<td>Truck, Pickup</td>
<td>Hour</td>
<td>5</td>
<td>$23.41</td>
<td>$117.05</td>
</tr>
<tr>
<td>Equipment Installation</td>
<td>963</td>
<td>Tractor, agricultural, 60 HP</td>
<td>Hour</td>
<td>5</td>
<td>$24.99</td>
<td>$124.95</td>
</tr>
<tr>
<td>Materials</td>
<td>1057</td>
<td>Gate, Pipe, 12”</td>
<td>Each</td>
<td>1</td>
<td>$186.29</td>
<td>$186.29</td>
</tr>
<tr>
<td>Mobilization</td>
<td>1138</td>
<td>Mobilization, small equipment</td>
<td>Each</td>
<td>1</td>
<td>$173.63</td>
<td>$173.63</td>
</tr>
</tbody>
</table>

1. **Cost Category** – Designated subdivisions of the costs of implementing conservation practice and activities. The cost categories approved for use in developing cost data are materials, equipment, labor, mobilization, acquisition of technical knowledge, and foregone income. Refer to sections 600.10(E), 600.23, and 600.51.

2. **Number (i.e., Component ID)** – The specific identifier for the component assigned automatically by the PSA.

3. **Component Name** – A short description of the component used. Component name should follow a simple naming convention: words used in a component name should start from general to specific; separated by a comma when necessary. There should be no other special symbols used within component names nor uncommon abbreviations. Example: “Tractor, Agricultural, 60 HP”.
   i. Component description should be a narrative written in normal English word order, include all information in the component name necessary to separate the component from similar components, and to price the component precisely. Component description should not include any company name or brand names.

4. **Component Unit** - The common unit that the product or service is usually priced or used. National technical specialists and RSMs should refrain from using uncommon units. When no common unit name is available for a component, try to use the unit “each” and then describe what the “each” means in component description.

5. **Quantity** – The number of units used in the typical scenario.

6. **Price (i.e., Component Cost)** – The cost of implementing a single unit of a specified practice or activity type.

7. **Total Cost** – The result of multiplying the price times the quantity.

(300-600-H, 1st Ed., Oct 2016)
600.32 Documentation

A. Payment schedules serve as the basis for justification of program payment rates that are eventually recorded in cost lists electronically transmitted to support business tools (e.g. CST, ProTracts) and publications in the Field Office Technical Guide (FOTG) for public, partners, and potential program participants. The entire process to document estimated costs and provide assurance that technical and program requirements are met is a significant part of the process to develop payment schedules. The end product is not useful if the cost list is not appropriately used in business tools, not posted in due time for transparency and public scrutiny, or circumvents the review and approval process.

B. After all payment schedules are reviewed and approved, the final payment schedules and cost lists also must be appropriately archived, electronically transmitted to business tools, and publically posted, per the following:

1. Final payment schedule workbooks (i.e., Scenario Detail Reports in PSA) must be uploaded and posted to each State online FOTG per requirements of:
   - 440 CPM, Part 512, Section 512.32(B)

2. Final cost lists must be electronically transmitted to Customer Service Toolkit (CST) and ProTracts per:
   - 440 CPM, Part 512, Section 512.32(B)

3. Final cost lists or payment rates must be posted to the State Web site 30 days prior to announced application periods:
   - 440 CPM, Part 512, Section 512.32(B)

4. Once announced, electronically transmitted to ProTracts, and posted publically, Scenarios and Payment Rates may not be modified or changed.
   - 440 CPM, Part 512, Section 512.32(B)

Subpart E – Payment Schedule Application

600.40 Payment Schedule Application (PSA)

A. PSA is a Web-based software application that automates and centralizes the NRCS payment schedule development and management process. It combines the semi-automated procedures developed since the initiation of payment schedule development into one common format. The main purposes of PSA include:

1. Component management. There is a large number of components in the payment schedule system available for national and regional scenario teams to choose. PSA restricts component usage by conservation practice and allows only pertinent components to be used for scenario development. The allowable component list may be managed as follows:
   i. Add an existing component to be made available to a practice
   ii. Create a new component for a practice
   iii. Request a price reconsideration of an existing component
   iv. Request to remove a component from a practice

(300-600-H, 1st Ed., Oct 2016)
v. Deactivate a component from all practices

(2) Component pricing. PSA serves as a data warehouse for the storage and documentation of component prices developed by the national cost team. It also provides indexing functions in the component cost development. Currently, two indexing functions are used:
   i. State price index. If data sources can only be located for one or a few States, a State price index is used to estimate component prices for all States. Refer to section 600.26.
   ii. NASS prices paid index is being used to index all component prices to one common time period.

(3) Practice scenario management. PSA provides an automated review process for payment schedule scenario development. New scenarios can be developed, as well as existing scenarios updated and edited in the system. In either instance, a scenario is only allowed following a complete technical and programmatic review.

(4) State payment rate development. Payment schedule scenarios developed at the regional level can be adopted by any State within the region, unless noted in guidance. After adopted, component prices are converted in the scenario to the State. The payment rate is calculated based on a percent of the total scenario cost. This percent is established by the State Conservationist and placed into PSA by the State payment schedule manager (SPS). Refer to section 600.10(B), 600.11(B), 600.13(E), and 600.31(B) for additional guidance.

(5) Administrative. PSA includes a role to centralize the administrative functions of the payment schedule program. The role created for this is the PSA administrator (PSA Admin). The duties of the PSA Admin include:
   i. Manage payment schedule update cycles. An update cycle is the period during a fiscal year that updates to component prices and scenarios can be made. During any fiscal year, only one update cycle may be open at a time; and after closed, an update cycle cannot be re-opened. To accommodate for any late developing initiatives or programs, subsequent update cycles may be opened to account for needed changes.
   ii. Assign conservation practices to discipline groups. Refer to 600.02(H) for addition guidance on discipline groups.
   iii. Manage payment schedule region designations and assign States to applicable regions.
   iv. Input program payment rate percentage caps as determined by programmatic policy.

(6) Report management. PSA provides online reports available to users for component information and scenario development. These reports are downloadable to excel spreadsheet or PDF for external use. PSA also provides payment rates in the appropriate format used in business tools (CST and Protracts).

Note: Refer to Exhibit 600.54, PSA User Guide for additional guidance.

(300-600-H, 1st Ed., Oct 2016)
Subpart F – Exhibits

600.50 Definitions – Common Terms

Definitions for many common terms used in this handbook can be found in 440 CPM, Part 502 “Terms and Abbreviations Common to All Programs”.

600.51 Practice Definition, Purpose, Lifespan, Cost Categories

Click Here For Practice Guidance

600.52 Example References: Foregone Income Calculations

FI components were established in acres or (Animal Unit Month) units. Typical scenarios reflecting a different unit must undergo a conversion to acres or AUM to use FI components. FI components may be used for the following activities:

- Land taken out of production. Unit of acres must be equal to the typical scenario size. If a combination of crops is used, the total acres must not exceed the typical scenario size.
  - Examples:
    - Typical scenario contains 100 acres of corn:
      - FI, Corn Dryland
      - Component Description: Corn is Primary Crop
      - Unit: Acre
      - Price ($/unit): 100
    - Typical scenario contains 100 acres of corn and soybeans in rotation (50 acres each).
      - The combination of crops must be equal to the scenario size:
        - FI, Corn Dryland
        - Component Description: Corn is Primary Crop
        - Unit: Acre
        - Price ($/unit): 50
        - FI, Soybeans Dryland
        - Component Description: Soybeans is Primary Crop
        - Unit: Acre
        - Price ($/unit): 50
  - Delayed harvest or planting. Foregone income must reflect the percent of acres lost as a result of the activity.
    - Example: 100 acres typical size with a 12 percent loss due to delayed harvest or planting. Total FI would be equal to 12 acres:
  - Delayed or lost grazing of AUMs. FI reflects the percent loss of AUMs as result of the activity.
Example: 35 percent loss of forage AUMs (entered as .35 AUMs):

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Component ID</th>
<th>Component Name</th>
<th>Component Description</th>
<th>Unit</th>
<th>Price ($/unit)</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foregone Income</td>
<td>2079</td>
<td>FI, Grazing</td>
<td>Typical value of an AUM</td>
<td>AUM</td>
<td>0.35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Change in Crops. FI must reflect a change in units by using positive and negative units. A negative number represents “before practice situation” and a positive number represents “after practice situation”. The sum of negative and positive numbers must equal zero.
  - Example: 100 acres of Irrigated corn/soybean rotation converted to a dryland rotation (50 acres each). The “before crops” quantity must be treated as a positive value equal to “100.” The “after crops” quantity must be treated as a negative value equal to “-100.”

### 600.53 Resource Concerns

A resource concern is defined as a specific natural resource problem that represents a significant concern in a State or region, and is likely to be addressed through the implementation of conservation practices or enhancements by producers, according to technical standards. See chart below for list of primary resource concerns.
<table>
<thead>
<tr>
<th>Resource Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Soil Erosion</strong></td>
</tr>
<tr>
<td>• Sheet, Rill, &amp; Wind Erosion:</td>
</tr>
<tr>
<td>- Sheet and Rill Erosion (101)</td>
</tr>
<tr>
<td>- Wind Erosion (102)</td>
</tr>
<tr>
<td>• Concentrated Flow Erosion:</td>
</tr>
<tr>
<td>- Ephemeral Gully Erosion (103)</td>
</tr>
<tr>
<td>- Classic Gully Erosion (104)</td>
</tr>
<tr>
<td>• Excessive Bank Erosion from Streams, Shorelines or Water Conveyance Channels (105)</td>
</tr>
<tr>
<td><strong>Soil Quality Degradation</strong></td>
</tr>
<tr>
<td>• Organic Matter Depletion (106)</td>
</tr>
<tr>
<td>• Compaction (107)</td>
</tr>
<tr>
<td>• Subsidence (108)</td>
</tr>
<tr>
<td>• Concentration of Salts or Other Chemicals (109)</td>
</tr>
<tr>
<td><strong>Excess Water</strong></td>
</tr>
<tr>
<td>• Ponding, Flooding, Seasonal High Water Table, Seeps and Drifted Snow:</td>
</tr>
<tr>
<td>- Seeps (110)</td>
</tr>
<tr>
<td>- Runoff, Flooding, or Ponding (111)</td>
</tr>
<tr>
<td>- Seasonal High Water Table (112)</td>
</tr>
<tr>
<td>- Drifted Snow (113)</td>
</tr>
<tr>
<td><strong>Insufficient Water</strong></td>
</tr>
<tr>
<td>• Inefficient Use of Irrigation Water (114)</td>
</tr>
<tr>
<td>• Inefficient Moisture Management (115)</td>
</tr>
<tr>
<td><strong>Air Quality Impacts</strong></td>
</tr>
<tr>
<td>• Emissions of Particulate Matter (PM) and PM Precursors (128)</td>
</tr>
<tr>
<td>• Emissions of Ozone Precursors (129)</td>
</tr>
<tr>
<td>• Emissions of Greenhouse Gases (GHGs) (130)</td>
</tr>
<tr>
<td>• Objectionable Odors (131)</td>
</tr>
<tr>
<td><strong>Degraded Plant Condition</strong></td>
</tr>
<tr>
<td>• Undesirable Plant Productivity and Health (132)</td>
</tr>
<tr>
<td>• Inadequate Structure and Composition (133)</td>
</tr>
<tr>
<td>• Excessive Plant Pest Pressure (134)</td>
</tr>
<tr>
<td>• Wildfire Hazard, Excessive Biomass Accumulation (135)</td>
</tr>
<tr>
<td><strong>Water Quality Degradation</strong></td>
</tr>
<tr>
<td>• Pesticides Transported to Surface and Groundwater:</td>
</tr>
<tr>
<td>- Pesticides in Surface Water (116)</td>
</tr>
<tr>
<td>- Pesticides in Groundwater (117)</td>
</tr>
<tr>
<td>• Excess Nutrients in Surface and Groundwater:</td>
</tr>
<tr>
<td>- Nutrients in Surface Water (118)</td>
</tr>
<tr>
<td>- Nutrients in Groundwater (119)</td>
</tr>
<tr>
<td>• Salts in Surface and Groundwater:</td>
</tr>
<tr>
<td>- Salts in Surface Water (120)</td>
</tr>
<tr>
<td>- Salts in Groundwater (121)</td>
</tr>
<tr>
<td>• Excess Pathogens and Chemicals from Manure, Bio-solids or Compost Applications:</td>
</tr>
<tr>
<td>- Surface Water (122)</td>
</tr>
<tr>
<td>- Groundwater (123)</td>
</tr>
<tr>
<td>• Petroleum, Heavy Metals and Other Pollutants Transported to Receiving Waters:</td>
</tr>
<tr>
<td>- Surface Water (124)</td>
</tr>
<tr>
<td>- Groundwater (125)</td>
</tr>
<tr>
<td>• Excessive Sediment in Surface Water (126)</td>
</tr>
<tr>
<td>• Elevated Water Temperature (127)</td>
</tr>
<tr>
<td><strong>Fish and Wildlife - Inadequate Habitat</strong></td>
</tr>
<tr>
<td>• Habitat Degradation:</td>
</tr>
<tr>
<td>- Food (136)</td>
</tr>
<tr>
<td>- Cover/Shelter (137)</td>
</tr>
<tr>
<td>- Water (138)</td>
</tr>
<tr>
<td>- Habitat Continuity (Space) (139)</td>
</tr>
<tr>
<td><strong>Livestock Production Limitation</strong></td>
</tr>
<tr>
<td>• Inadequate Feed and Forage (140)</td>
</tr>
<tr>
<td>• Inadequate Shelter (141)</td>
</tr>
<tr>
<td>• Inadequate Water (142)</td>
</tr>
<tr>
<td><strong>Inefficient Energy Use</strong></td>
</tr>
<tr>
<td>• Equipment and Facilities (143)</td>
</tr>
<tr>
<td>• Farming/ranching practices and field operations (144)</td>
</tr>
</tbody>
</table>

NOTE: Numbers in parenthesis represent CSP numeric enhancement codes.
### 600.55 Units of Measurement

<table>
<thead>
<tr>
<th>Units of Measurement</th>
<th>Name</th>
<th>Unit</th>
<th>Name</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000 BTU</td>
<td>kBTU</td>
<td></td>
<td>Gallon per Minute</td>
<td>Gal/Min</td>
</tr>
<tr>
<td>1,000 BTU/ Hour</td>
<td>kBTU/Hr</td>
<td></td>
<td>Gram/Cubic Centimeter</td>
<td>G/CC</td>
</tr>
<tr>
<td>1,000 Foot</td>
<td>Ft</td>
<td></td>
<td>Head per day</td>
<td>Hd/Day</td>
</tr>
<tr>
<td>1,000 Gallon</td>
<td>kGal</td>
<td></td>
<td>Height x Diameter</td>
<td>HgtxDia</td>
</tr>
<tr>
<td>1,000 Gallon-Mile</td>
<td>kGal-Mi</td>
<td></td>
<td>Horsepower</td>
<td>HP</td>
</tr>
<tr>
<td>1,000 Square Foot</td>
<td>kSqdFt</td>
<td></td>
<td>Horsepower-Hour</td>
<td>Hphr</td>
</tr>
<tr>
<td>100 Foot</td>
<td>100 Ft</td>
<td></td>
<td>Hour</td>
<td>Hr</td>
</tr>
<tr>
<td>Acre</td>
<td>AcFt</td>
<td></td>
<td>Inch</td>
<td>In</td>
</tr>
<tr>
<td>Acre Inch</td>
<td>ac-in</td>
<td></td>
<td>Inch Diameter</td>
<td>InDia</td>
</tr>
<tr>
<td>Acre Inch per Year</td>
<td>Ac-In/Yr</td>
<td></td>
<td>Inch per Acre per Year</td>
<td>In/Ac/Yr</td>
</tr>
<tr>
<td>Acre-in/Ac/Yr</td>
<td>Acre-in/Ac/yr</td>
<td></td>
<td>Inch-Foot</td>
<td>InFt</td>
</tr>
<tr>
<td>Acre</td>
<td>Ac</td>
<td></td>
<td>Kilowatt</td>
<td>Kw</td>
</tr>
<tr>
<td>Acre/Year</td>
<td>Ac/Yr</td>
<td></td>
<td>Linear Feet per Year</td>
<td>Linear Ft/yr</td>
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<tr>
<td>Air Quality Index</td>
<td>AQI</td>
<td></td>
<td>Linear Foot</td>
<td>LnFt</td>
</tr>
<tr>
<td>Animal Unit</td>
<td>AU</td>
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<td>Microgram/cubic meter</td>
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(300-600-H, 1st Ed., Oct 2016)