Massachusetts 2005 EQIP
Application Evaluation Instructions

DESCRIPTION

The NRCS provides financial and technical assistance through the Environmental Quality Incentives Program (EQIP), to farmers who voluntarily apply conservation practices that treat national, state and local natural resource concerns.

Massachusetts ranks and approves applications for funding based on one state-wide process, developed in accordance with national guidance and in conjunction with priorities identified by the State Technical Committee and Local Work Groups. The ranking criteria are defined in Massachusetts *2005 EQIP Application Evaluation Workbook*. Applications are scored by identifying the natural resource concerns to be addressed, and the extent of treatment and environmental benefit to be achieved. Additional points are given to proposals that enhance compliance with environmental regulations, agricultural land protection, leveraged funds, agricultural production, conservation systems and innovation.

Documents required for ranking applications include the following:

a) 2005 Application Worksheet
b) Application Evaluation Matrix workbook
c) Supporting Documents (i.e. location of environmentally sensitive areas, cost estimate)

STEP-BY-STEP INSTRUCTIONS

1. Enter the Applicant's Name on the top line of the *Calculations* spreadsheet. This entry will be carried forward throughout the workbook.
2. List the planned conservation practices and cost information for the application on the *Practice Costs* spreadsheet (CCC-MA-1201), and identify any *additional* funding.

   Step-by-Step: Enter specific practice and cost data for the application in the yellow-cells.

   a) Select the practice code(s) from the drop-down box.
   b) Enter the quantity of units planned based on field data and calculations.
   c) Enter the *Estimated Unit Cost* –use the "unit cost" for the practice from the *Massachusetts 2005 EQIP Cost List.* When a practice is reported in numbers (No.) or is comprised of components (i.e. concrete, pipe, etc.); then, the unit cost is the sum of the component unit costs.
   d) Use the *Cost Estimate Detail* sheet for estimating the cost of practices that are comprised of various components such as concrete, pipe, etc., and then enter the total practice cost in the *Practice Costs* sheet.
   e) Enter any other amount of funds used by the applicant to apply these practices, in the yellow cell labeled *Other Non-USDA/Non-Farmer Funds*. Note: the applicant may not receive more that 100% cost share. Non-USDA funding is not to be used to reduce the total program costs except when >100% of the total project cost is being funded. In such cases, one or more of the unit costs listed must be reduced to obtain a 100% total cost share.

      For example, if 1000 ft. of fence with a unit cost of $5.00 were cost shared at 75%, the *Estimated Total Project Cost* would be $5000, with a *Total Program Cost* of $3750 and a *Landowner's Cost* of $1250. If the project were

supplemented by $1500 of additional funding from other sources, then the *Landowner's Cost* would be indicated as a negative sum (-$250). When this occurs, reduce the over-run sum ($250) from the *Total Program Cost* ($3750) and divide by the number of *Units* (1,000 ft.) to calculate a corrected *Unit Cost* of $3.50. The result shows a *Total Program Cost* of $3500, *Other Funds* of $1500, and *Landowner's Cost* of $0.

f) *Signatures* are optional, and serve to document the applicant's preliminary decisions and acceptance of the project costs prior to contract development. Signatures should be obtained *after* the state ranking review and *before* application approvals.

3. Identify the extent to which the application meets the ranking criteria by selecting the appropriate elements from the yellow-shaded drop-down boxes on the *Calculations* sheet.

Step-by-Step:

a. Application evaluations are based on data gathered through the conservation planning process, and specifically, a resource inventory and assessment of the natural resource concerns of the land enrolled in the program. The conservation plan serves as the basis for the application and its evaluation.

b. In the *Environmental Benefits Calculator*, indicate the *Aspect/Problem* to be addressed for each resource concern. The default assumes that the concern is not applicable (N/A).

c. In the *Environmental Benefits Calculator*, indicate the before *(Benchmark Conditions)* and after *(Desired Outcome)* conditions for each resource concern—the conditions either "*meet"* or "*do not m*eet" NRCS quality criteria. The default assumes the quality criteria are not being met.

d. In the *Location Factors Calculator*, identify the environmentally sensitive areas affected by the conservation treatment. Treatment areas must be within mapped resource boundaries, within 300 ft. upslope of receiving surface waters, or ½ mile upslope of impaired waters and designated shellfish growing areas.

Note: Risk to environmentally sensitive areas must be documented using approved mapping conventions, including: Mass-GIS Outstanding Resource Water Maps, Natural Heritage Program, USGS Quadrangle maps, National Wetlands Inventory, Mass. Areas of Critical Environmental Concerns (ACEC) Program Guide, Designated Cold Water Fisheries—MA Division of Fish & Wildlife *list of trout streams*, US Fish & Wildlife Service *Migratory Fishes Map*, or MA Division of Marine Fisheries maps, potable private wells, Massachusetts 2002 Integrated List of Impaired Waters, and Massachusetts Nonpoint Source Pollution Action Strategy.

e. In the *Project Enhancement Calculator*, identify the features that add value to the application, including system durability *(practice lifespan* or *weighted average of combined practices)*, regulatory compliance, etc...

Note: Local priorities must be must identify and document by the District Conservationists in cooperation with his/her Local Work Group(s).

f. *Cost Effectiveness Calculator*: No entries are required here; however, the *Environmental Benefit Calculator* and the *Practice Costs* must be completed for this calculator to function.

Definitions

- Ag Land Protection
  Massachusetts has two very successful state programs, *Agricultural Preservation Restrictions* and *Farm Viability Program*, in addition to many land trusts that strive to protect agricultural lands. Points are awarded to applicants who currently have one of these and/or a USDA *Farmland and Ranchland Protection Program (FRPP)* restriction established on their property.

- Ag Production
  The 2002 Farm Bill promotes agricultural production and environmental quality as compatible goals. Massachusetts EQIP ranking system awards points to applications that enhance agricultural production in the following ways: a) organic and sustainable agriculture; b) food quality and safety*; and c) increases in crop yields or minimizing crop loss. **Food quality and safety* is an emerging international issue, but requires further development before it is applicable in the EQIP ranking system—no points will be assessed in this area this program year.

- Benchmark Condition
  Environmental gain is calculated by assessing the magnitude of the problem and extent of treatment. This is accomplished by using the NRCS Resource Quality Criteria (see *eFOTG, Sec. III*). There are only two choices available in ranking-- the condition currently: a) meets quality criteria; or b) does not meet quality criteria.

- Cost Effectiveness
  Cost effectiveness is mandated nationally, but it is not a driving factor in the point system. CE Points = (Environmental Benefit/Total Project Cost) x 5,000

- Desired Outcome
  The extent of treatment determines the desired outcome of the project. Based on NRCS Resource Quality Criteria, the practices scheduled will work to either: a) meet quality criteria; or b) NOT meet quality criteria.

- Conservation System Durability
  Durability credits the greater environmental benefit of longer-lived systems. It is measured using the life-span of the practice(s) being applied, or a "weighted average", based on the primary practice(s) in the system (see *EQIP Manual* 515.141).

- Environmental Benefit
  EB=Aspect/Problem x (Desired Outcome-Benchmark Condition) x Location Factor x Priority Factor
  Environmental Benefit assesses the aspect of the identified resource concern(s), the environmental gain achieved by the conservation treatment, and the location of the project in relation to environmentally sensitive areas. The priority factor emphasizes water quality projects, followed by water conservation, soil erosion and animal quality.

- Environmental Benefit Score
  This overall Environmental Benefit Score is the sum of the points assessed for environmental benefit, cost effectiveness and conservation system durability.

- Innovation
  Massachusetts envisions *innovation* as a process that tends to follow a normal curve of social acceptance, defined by three phases: a) *innovative* approaches are ahead of the curve, using cutting-edge technology and methods (practice examples--anaerobic digesters, biodegradable mulch); b) *adaptive* approaches reflect the larger field of practitioners, fitting new ideas and technology to traditional practices to produce improved effects (examples—pest management components such as biological controls,

transition to organic production); and c) *adoptive* approaches simply appropriate readily available technology (examples—residue management, nutrient management).

- Leveraged Funds
  According to the EQIP Rule, "it is not the intent of the Department to restrict additional cost-shares that a participant may receive from non-USDA sources, but to achieve cost-effectiveness USDA will reduce EQIP assistance when non-USDA assistance together with USDA assistance for a practice exceeds 100%." In the ranking system, additional points are given to applications that bring outside sources of funding into the project. This calculation is made automatically.

- Local Priority
  Each NRCS field office, with local working group concurrence, shall determine and document the top three resource concerns in its area, rating them in order of priority. These concerns will receive 5-3-1 points, respectively, in the application ranking score. Field Offices shall submit their list to the Program Manager prior to ranking applications.

- Location Factor
  Massachusetts has traditionally evaluated applications considering their impact on environmentally sensitive areas. These "location factors" will be used again in the 2005 ranking process, with two new data layers—Impaired Waters, and an updated Zone II and IWPA map. If a resource concern exists and the proposed treatment affects an environmentally sensitive area, then the sum of the assigned values are applied in the environmental benefit formula.

  The approved list of location factors includes the following:

  a) Impaired Water
     - Massachusetts 2002 Integrated List of Impaired Waters
     - Massachusetts Nonpoint Source Pollution Action Strategy

  b) Drinking Water Supplies:
     - DEP Approved Wellhead Protection Area (Zone II)
     - DEP Interim Wellhead Protection Area (IWPA)
     - Outstanding Resource Water
     - Sole Source Aquifer (within recharge zone)
     - Private Wells (within 300 ft. of source)

  c) Other Waters:
     - Groundwater
     - Surface Water

  d) Fish & Wildlife Habitat:
     - Estimated Habitat
     - Priority Habitat
     - Areas of Critical Environmental Concern (ACEC)
     - Designated Shellfish Growing Area *(<$^1/_2$ mi. upslope)*
     - *(treatment area is ≤300 ft. upslope)*
     - Anadromous Fish Runs, and Cold Water Fisheries *(≤300 ft. upslope)*

- Points
  Each application accumulates points for the aspects of each criterion that it addresses. The points are listed in the far right-hand column of the evaluation matrix, subtotaled by section and totaled for a final ranking score.

- Project Enhancements
  There are seven additional features that may enhance an application: assistance with regulatory compliance or avoidance, innovative approaches, leveraged funds, planning

to different levels of an RMS, agricultural land protection, agricultural production, and local priority. Refer to the matrix for the criteria by which each element is measured.

- Ranking Criteria
  There are seventeen elements that are considered in Massachusetts ranking system, including:
  - *Resource Concerns* (7): water quality, water quantity, soil quality, soil erosion, air quality, plant quality and animal quality;
  - *Environmental Benefit* (3): environmental benefit, cost effectiveness and conservation system durability; and
  - *Project Enhancement* (7): (regulatory compliance or avoidance, innovation, leveraged funds, resource management systems, agricultural land protection, agricultural production and local priority

  These 17 elements are listed vertically on the *y*-axis of the matrix, and are further defined by three levels or aspects, horizontally across the *x*-axis of the matrix. See the *Application Evaluation Matrix.*

- Regulatory Compliance or Avoidance
  Applications that help Massachusetts DFA priority livestock farms comply with the EPA Concentrated Animal Feeding Operation (CAFO) Rule.

- Resource Concerns Score
  The resource concerns score is a summation of the points assigned to the identified concerns of the application. They are totaled automatically and are separate from the environmental benefit points.

- Resource Management Systems (RMS)
  Massachusetts NRCS and the State Technical Committee believe that the desired level of treatment is a Resource Management System (RMS). Points are given to applications that complete a new, revised or existing RMS at various levels, including: a) whole farm, and Conservation Management Unit (CMU) or field level. Single practices that do not constitute an RMS do not receive these points.

- Values
  A range of values (5-3-1-0) are assigned to the varying aspects of the ranking criteria, with the highest priority assigned a value of 5. When national priorities are addressed, the values are doubled in the scoring.