UNIQUE PERFORMANCE OBJECTIVES: USDA-NRCS NUTRIENT MANAGEMENT PLANNING

The following Performance Objectives are unique to the Proficiency Areas and Performance Objectives for Nutrient Management Planners as created by V.E. Associates, L.L.C. (2005) for USDA-NRCS. Performance Objectives covered by the International CCA and Tri-State Performance Objectives for the CCA Program are not included in this document.

The AgLEARN Modules; Introduction to Water Quality and Nutrient and Pest Mgt. Considerations in Nutrient Management Planning were added to cover areas needed to provide the 4-R certificant an education into the USDA-NRCS perspective to water quality and nutrient management.

Proficiency Area 1: Introduction to Nutrient Management Planning

1.1-List NRCS roles and responsibilities in nutrient management planning as described in the following documents: GM 190-402, Nutrient Management Standards 590, Field Office Technical Guide (FOTG) Section IV

1.2-List national, state-specific, and local-specific policies that relate to nutrient management planning

1.3-Describe your state's nutrient management certification process

1.4-Explain why nutrient management is important to the environment and public health

1.5-Explain the responsibility of nutrient management planners

1.7-Identify professional risks involved for the planner in nutrient management planning

1.8-Describe the roles and responsibilities of private entities and agencies other than the NRCS in nutrient management planning

1.10-Incorporate national, state, and local water quality regulations into the nutrient management components of a conservation plan

Proficiency Area 2: The Science of Nutrient Management Planning

2.4-Explain how soil test nutrient levels relate to crop yield response and potential environmental impacts

2.5-State the environmental risk of applying nutrients above economic optimums

2.10-List negative impacts of C, N, P, K, and S on the environment

2.13-Describe the role of soil quality in nutrient management planning

2.15-Describe how eutrophication occurs

2.16-List consequences of eutrophication

2.18-Explain why heavy metals are hazardous in the environment

Proficiency Area 3: The Influence of Climate, Irrigation, and Drainage on Nutrient Management

3.2-Explain the importance of the following climate and weather phenomena on nutrient management planning: intensity, type, and duration of precipitation; temperature, humidity, wind, and barometric pressure

3.3-Locate climatological data for a given site

3.5-Explain how irrigation affects nutrient management planning

3.6-Describe how nutrient contamination of ground and surface water can occur from irrigation

3.8-Use a soil survey to determine the available water-holding capacity and intake rate of a soil to be irrigated
3.9-Use NRCS irrigation guide or local weather data to determine daily/monthly consumptive use values
3.01-Calculate nitrogen credits from irrigation water application
3.11-Describe the role of fertigation in nutrient management planning
3.13-Explain how drainage affects nutrient management planning
3.14-Describe how nutrient contamination of surface water can occur from tile drainage
3.15-Describe how to use drainage management to reduce nutrient losses to surface water

Proficiency Area 4: Environmental Risk Analysis
4.1-Explain why environmental risk analysis is an important component of nutrient management planning
4.3-Describe the importance of social and interpersonal concerns in nutrient management planning
4.5-Descibe how to use water quality vulnerability assessment tools in conservation planning
4.7-Describe how to use soil test results in environmental risk analysis
4.12-Use individual site characteristics for the Leaching Index to characterize the vulnerability of a site for nitrate leaching
4.17-Define TMDL
4.18-Locate a TMDL list for a watershed in a state
4.19-Describe how TMDLs impact a nutrient management plan in a watershed
AgLEARN: Successfully complete (pass the online exam) course: introduction to water quality

Proficiency Area 5: Nutrient Application Mgt. (Covered by International and Tri-State Objectives)

Proficiency Area 6: Components of Nutrient Management Planning
AgLEARN: Successfully complete: nutrient & pest mgt. Considerations in Conserv. Planning (i, ii, and iii)

Proficiency Area 7: Implementing the Nutrient Management Plan
7.1-Identify parties responsible for implementing a nutrient management plan
7.2-Descrigbe procedures to identify and track changes in soil test nutrient levels over time
7.3-Explain consequences of increasing soil nutrient levels after implementing a nutrient management plan
7.4-Identify changes in a farm operation that require updates/adjustments to a nutrient management plan
7.5-Identify implementation, follow-up, and recordkeeping components of a nutrient management plan as identified in the 590 Standard
7.6-Complete a “Nutrient Management Job Sheet”