STATEMENT OF WORK (SOW)

590 Nutrient Management

Owner: ____________________ Business I.D.: ______ County: ______ Date: ______
Operator: _______________ Tract No. __________ Field No(s). __________
Contract No./Revision No.: __________ Contract Item No.: __________ Field Office: __________

GENERAL INFORMATION:

Background Conservation Plan / Casefile Information is documentation that is gathered or prepared by the conservation planner during the first seven steps of the conservation planning process (refer to NRCS National Planning Procedures Handbook (NPPH) for details). This information should be included in the client’s casefile. While information within a client’s casefile is subject to the Freedom of Information Act (FOIA), the client may sign a waiver which would allow access of this material to a Technical Service Provider or other interested party as designated by the client.

Practice Design, Installation and Checkout Requirements are documentation deliverables that apply to the individual practice. Design, Installation & Checkout are categories of technical assistance which can be completed & submitted separately for certification.

Use of this Form: This form will be used as a checklist for verification of practice design, installation & checkout deliverables. Checked items are required to be documented.

Documentation Submittal: Documentation of deliverables in each category including this form must be provided before work can be submitted for payment.


CONSERVATION PLAN/CASEFILE INFORMATION NEEDED:

☐ Client’s objectives (assistance notes)
☐ Resource inventory (NE-CPA-83 or equivalent)
☐ Environmental Evaluation (NE-CPA-52)
☐ Conservation plan for the treatment unit (NE-CPA-68, Toolkit Plan or equivalent)
☐ Location (Map or photo including legal description)
☐ Soil Survey Information for Nitrogen Leaching Potential and Phosphorus Index Risk Assessment
☐ Purpose of the practice (List all that apply/design must account for these purpose(s)): ______________________
☐ Nutrient Management general practice requirements, including records to be kept, jobsheets to be utilized, etc.

Check the box(es) to indicate supporting practices needed to facilitate Nutrient Management Plans (NMP) (refer to the conservation plan for the more information):

☐ 313 Waste Storage Facility
☐ 329, 345 or 346 Tillage/Residue Management
☐ 332 Contour Buffer Strips
☐ 344 Residue Management, Seasonal
☐ 390 Riparian Herbaceous Cover
☐ 393 Filter Strip
☐ 449 Irrigation Water Management
☐ 601 Vegetative Barrier
☐ 635 Vegetative Treatment Area
☐ 328 Conservation Crop Rotation
☐ 330 Contour Farming
☐ 340 Cover Crop
☐ 386 Field Border
☐ 391 Riparian Forest Buffer
☐ 585 Strip Cropping
☐ 595 Integrated Pest Management
☐ 633 Waste Recycling
☐ Other (specify by practice code)
NUTRIENT MANAGEMENT PLAN DESIGN DELIVERABLES - Provide copies/verification/documentation for each deliverable to NRCS. All information, including this SOW, must be accounted for in document form and attached. If a box is left unchecked, provide an explanation why information was not applicable or completed. Nutrient Management Plans (NMPs) include nutrient budgets for nitrogen (N), phosphorus (P) and potassium (K).

For other planned practice deliverables refer to specific Statements of Work for a practice. Refer to FOTG Sec. IV, 590, Practice Specifications for Nutrient Management (NM) (S-590), Nebraska Conservation Planning Sheet No. 11, and applicable NebGuides and Extension Circulars.

1) Cover & Signature Page:
   a) Name of owner/operator, phone number and mailing address.
   b) If developed by Technical Service Provider (TSP), name, address and phone number.
   c) Total number of acres in NMP.
   d) All required signature for acceptance of NMP (For Conservation Activity Plans and NMPs submitted by Technical Service Providers (TSPs), the TSP must sign with client).

2) Background & Site Information, including:
   a) Clients Objectives.
   b) Description of natural resources concerns (water, erosion, etc.) (TSPs only) NRCS completes NE-CPA-52.
   c) Field Name or codes for respective fields.
   d) Cropping & Fertilizer History (used NE-CPA-83 NM 590 Inventory Jobsheet or equivalent form) – provide information in a summary table for one full cropping rotation (i.e. corn-bean, provide info for each crop year) include the following:
      i) Farmable acres and spreadable acres,
      ii) Crop type and actual yield,
      iii) Crop rotation,
      iv) Irrigation method, as applicable,
      v) Tillage.
      vi) Commercial fertilizer & manure history for crop rotation including:
         (1) Nutrient Source(s),
         (2) Application Rate(s),
         (3) Application Timing(s),
         (4) Application Method(s) (include days to incorporation if broadcasted and as applicable),
         (5) Estimated Total amount nutrient applied for N, P & K for each site or crop each year.
      vii) Existing test reports for soil sampling, manure analysis, irrigation water testing.

3) Procedures and/or protocols for sampling, and calibration that complies with 590 requirements (as applicable to the operation), and any other applicable statements (See S-590):
   a) Soil Sampling and Testing,
   b) Manure Sampling and Testing,
   c) Irrigation Water Sampling and Testing (as applicable),
   d) Application Equipment Calibration (non-commercial, i.e. manure spreaders, etc.),
   e) Other: _____________________________.

4) For each site, individual site or aerial site photographs, showing field boundaries labeled with field boundaries and labeled with legal description, acres, and scale. (Copies of all FSA 578 forms (as permission) for all land owned and rented.
   a) Soils maps for each site (labeled as above).
   b) USGS topography maps for each site (labeled as above).
   c) Non-technical description soil summary for all soils to include soil name, percent slope, soil texture.
   d) Indication of sensitive areas (i.e. wetlands, wells, surface water, tile inlets, etc.).

5) Soil & Risk Assessments – Complete N-Leaching Risk Assessments and Phosphorus Index (P-Index) Risk Assessments (as applicable) for each field or sub-field. For plans with multiple fields, develop one or more summaries tables representing risk assessment results for P and N including the following information:
   a) Site number / name & legal description.
   b) Nitrogen Leaching Risk Potential that includes
      i) Predominant soil type and slope,
      ii) Soil texture, and
      iii) For all nutrients to be applied, the risk potential for timing based on soil texture for fall application; spring pre-plant application; and sidedress / split application.
   c) P-Index Risk Assessment (as applicable) – Include a copy of the P-index summary report in the NMP.
i) P-Index value and rating,
ii) Critical dominant soil type and slope, where critical dominant soil type must be greater than 30% of the field,
iii) P-index Erosion Estimator value (from NE P-Index) or RUSLE2 value,
iv) Soil test P value, and
v) Existing and/or planned erosion practices and/or management.
vi) If any P-index scores are high or very high, provide an action plan for reducing the rating to medium.

6) Planned Land Treatment Conservation Practices (consistent with P-index) that meets the requirements 180-VI-NPPH, Part 600.54 (b) (1) – Criteria for Land Treatment Practices.
   a) ☐ Plan map for each land application sites (GIS-developed map is preferred) including soils maps and the following:
      i) Fields shall be delineated to show setbacks, buffers, waters, conservation practices planned & existing, and other site specific features important to nutrient management planning (risers, inlets, wells, etc.).
      ii) Identification of sensitive areas such as sinkholes, streams, springs, lakes, ponds, wells, gullies, and drinking water sources.
      iii) Other site information features of significance, such as property boundaries or occupied dwellings.
   b) ☐ Include the practice narrative and O&M requirements for each planned land treatment conservation practice.
   c) ☐ Summary of planned management practices used for erosion control such as no-till, contouring, etc. (can be summarized with P-index).
   d) ☐ Estimate of practice units for all runoff and erosion control practices to be installed (such as waterways, terraces, grade stabilization structures, underground outlets, filter strips, other buffers, etc.).

7) Planned Nutrient Management Budget (for each field) for N, P and K that meets technical criteria for Nutrient Management Standard 590 (use NE-CPA-38, NE-CPA-82 or equivalent forms):
   a) ☐ Planned crop(s) and 5-year yield average.
   b) ☐ Prior year crop(s) and yield.
   c) ☐ Crop nutrient requirements (N, P and K).
   d) ☐ Crop nutrient credits (i.e. residual N, O.M., past manure applications, legumes, etc.).
   e) ☐ Planned Nutrient Applications (source, rate per acre, total nutrients applied, timing, and method).
   f) Existing Test Reports:
      i) ☐ Soil test reports with sampling depths and maps (with sampling locations) for each field. Soils sampling reports must be current for N and no more than 5 years old for P; if manured, not more than 1 year old for P.
      ii) ☐ Manure analysis for each type and source, as applicable. If manure was imported, obtain report copy from provider. Obtain copies of reports for the last five years and use averaged values.
      iii) ☐ Irrigation water no older than 5 years, as applicable.
      iv) ☐ Other:_________________

8) Planned Operation and Maintenance requirements, provide narratives:
   a) ☐ Description / method for annual calibrations for commercial fertilizer and manure application equipment (owned by applicant).
   b) ☐ Periodic plan review, no less than every crop rotation cycle or soil testing event.
   c) ☐ Monitor fields receiving manure or biosolids for phosphorus (P-index) and heavy metals (UNL and State requirements), respectively - as applicable.
   d) ☐ Monitor for significant changes in animal numbers, feed type/ration or manure application occur - as applicable.

9) Record Keeping Requirements. Records to be maintained for five years. Review with Client.
   a) ☐ Testing reports:
      i) Soil Sampling - sample for N as applicable; sample soils prior to manure application event; sample for P&K once per crop rotation but no less than every five years. Include soil sampling location maps.
      ii) Organic products sampling - manure, compost, biosolids, etc. – annual (as applicable).
      iii) Irrigation Water – once every five years (as applicable).
      iv) Plant tissue (as applicable).
   b) ☐ Planned nutrient budget for each field:
      i) Current year crop(s) and 5-year average yield (or realistic yield goals),
      ii) Prior year crop,
      iii) Nutrient requirements,
      iv) Nutrient credits,
      v) Planned application rate, source, timing and method,
      vi) Nitrogen Leaching Risk assessment,
      vii) As applicable, Phosphorus Risk assessment.
c) Actual Application Events:
   i) Crop(s) planted, harvest dates, yields, and crop residue removed,
   ii) Application date,
   iii) Application source and applied quantities (rate per acre and total nutrients applied),
   iv) Application method,
   v) Name of any nitrogen stabilizers were used,
   vi) Amount (inch/acre) of Irrigation Water applied if nitrogen is credited as a nutrient credit (source).
   vii) For all imported manure, wastewater, compost, biosolids, etc.
      1) Date received and name of provider.
      2) Nutrient analysis, if one wasn’t provided then sample and test product on your own.
      3) Nutrient type (beef, swine, etc.), source (pens, deep pit, etc.) and quantity.
      4) Weather conditions and soil moisture at time of application, lapsed time to manure incorporation, rainfall or irrigation event.

d) Dates of plan review, review name, and any plan modification.

dates
All activities are conducted in compliance with National Environmental Policy Act (NEPA). All Special Environmental Concerns listed on NE-CPA-52 will be evaluated during all phases of work. If environmental concerns arise during design, installation or checkout, NRCS must be contacted for consultation prior to proceeding. If concerns are found, NRCS will certify NEPA compliance by signature on NE-CPA-52, prior to commencing design or installation of practice.

11) Indication that applicable permits are obtained (prior to installation) and applicable local, state and federal laws and regulations are adhered to, including setbacks, utilities, safety and zoning regulations.

INSTALLATION DELIVERABLES: (Provide copies/verification/documentation for each deliverable to NRCS, including job sheets referenced under the Design Deliverables or equivalent documentation.)

1) Review the following with the client and/or crop consultant:
   a) Nutrient management plan including planned nutrient budget.
   b) Location of nutrient management: Indicate on map / sketch the field boundaries staked/marked for each nutrient management treatment (timing, form, rate, and method of placement).
   c) Planned land treatment practices – as applicable.
   d) Operation and Maintenance requirements.
   e) Records Requirements for implementation.

2) Record any relevant correspondence with the client or contractor.

3) Implementation of Nutrient Management Plan- Record Actual Application Events (client and/or crop consultant):
   a) Crop(s) planted, harvest dates, yields, and crop residue removed,
   b) Application date,
   c) Application source and applied quantities (rate per acre and total nutrients applied),
   d) Application method,
   e) Application site maps if application rates, source and/or method vary across the field.
   f) Name of any nitrogen stabilizers were used,
   g) Amount (inch/acre) of Irrigation Water applied if nitrogen is credited as a nutrient credit (source). (as applicable)
   h) For all imported manure, wastewater, compost, biosolids, etc. (as applicable)
      i) Date received and name of provider.
      ii) Nutrient analysis, if one wasn’t provided then sample and test product on your own.
      iii) Nutrient type (beef, swine, etc.), source (pens, deep pit, etc.) and quantity.
   i) For manure applications, weather conditions and soil moisture at time of application, lapsed time to manure incorporation, rainfall or irrigation event.

4) If nutrient application or nutrient stacking or stockpiling in fields is planned for winter, provide guidance on which fields are considered low risk for runoff that can be utilized (see S-590 for requirements). (as applicable)

5) Record any modifications to the nutrient management plan during plan implementation.

6) Oversight of the practice installation/application (record pertinent notes).

7) Advise the client and NRCS of any environmental compliance, resource or regulatory issues that arise during installation and discontinue installation until resolved. All activities are conducted in compliance with the National Environmental Policy Act (NEPA). All Special Environmental Concerns listed on NE-CPA-52 will be evaluated during all phases of work. If environmental concerns arise during design, installation or checkout, NRCS must be contacted for consultation prior to proceeding. If concerns are found, NRCS will certify NEPA compliance by signature on NE-CPA-52, prior to commencing design or installation of the practice.
COMMENTS: Use this space for installation notes or explanation of unchecked items (attach additional pages as needed): __________

CHECK OUT DELIVERABLES: (Provide copies/verification/documentation for each deliverable to NRCS)

Provide to the NRCS the following records on NE-CPA-38, NE-CPA-82, and/or NE-CPA-83 jobsheets or equivalent forms to demonstrate the nutrient management plan was implemented according to the Nutrient Management Standard.

1) Testing reports:
   a)  ☐ Soil Test reports and corresponding maps of sampling locations- sample for N as applicable; sample soils prior to manure application event; sample for P&K once per crop rotation but no less than every five years.
   b)  ☐ Organic products - manure, compost, biosolids, etc. – annual reports for each type and source (as applicable).
   c)  ☐ Plant tissue (as applicable).
   d)  ☐ Irrigation Water – once every five years (as applicable).

2)  ☐ Application Equipment Calibration dates (as applicable).

3)  ☐ Annual nutrient budget for N, P and K for each field with maps and field boundaries:
   a)  Current year crop(s) and 5-year average yield (or realistic yield goals),
   b)  Prior year crop,
   c)  Crop(s) Nutrient requirements,
   d)  Nutrient credits,
   e)  Planned application rate, source, timing and method,
   f)  Nitrogen Leaching Risk Assessment – every year,
   g)  Phosphorus Risk Assessment (as applicable) initially, then once every five years.

4)  ☐ Actual Application Event Annual Documentation:
   a)  Crop(s) planted, harvest dates, yields, and crop residue removed,
   b)  Field Map (with an indication of non-uniform fertilizer events, i.e. manure applied to part of the field)).
   c)  Application date,
   d)  Application source and applied quantities (rate per acre and total nutrients applied),
   e)  Application method,
   f)  Application site maps if application rates, source and/or method vary across the field.
   g)  Name of any nitrogen stabilizers were used,
   h)  Amount (inch/acre) of Irrigation Water applied if nitrogen is credited as a nutrient source from the budget.
   i)  For all imported manure, wastewater, compost, biosolids, etc. (as applicable)
      i)  Date received and name of provider.
      ii) Nutrient analysis, if one wasn’t provided then sample and test product on your own.
      iii) Nutrient type (beef, swine, etc.), source (pens, deep pit, etc.) and quantity.
      iv) If manure was commercially applied, name of applicator.
   j)  For manure applications, weather conditions and soil moisture at time of application, lapsed time to manure incorporation, rainfall or irrigation event.

5)  ☐ Unusual Weather events that affected yield (hail, wind, drought, etc.).

6)  ☐ Date(s) of plan review, reviewer name, and any plan modifications.

CERTIFICATION:

I have completed a review of the technical assistance documentation submitted for this practice and certify that NRCS Standards and Specifications are met and all applicable laws and regulations are complied with.

☐ Design  ☐ Installation  ☐ Checkout  (Check each category of documentation submitted with this certification)

Certified by: /s/ ______________________________   Date: ______________________________

Title: ______________________________   Representing: ______________________________

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NRCS REVIEW OF COMPLETED DELIVERABLES

☐ Check a minimum of 10% of the records for nutrient budget areas (no less than one budget area per client) to determine if 590 standards have been met. Document whether Nitrogen and Phosphorus rates meet 590 requirements based on NE-CPA-38, NE-CPA-81 & NE-CPA-82, printouts from UNL software, or equivalent documentation. If application rates exceed maximum allowed rates in the 590 standard, document whether rates can be justified based applicable risk assessments located in state guidance and S-590.

☐ Progress reporting completed in Performance Results System (PRS):

Amount applied: ______________ Date: ______________ Reported by Whom: ______________

________________________________________________________________________________

SUPPORT REFERENCES

1) National NRCS Policy and Guidance

   • Nebraska FOTG, Section IV - Conservation Practices access at http://efotg.nrcs.usda.gov/references/public/NE/NE_PDR_Index.pdf
   • Nebraska FOTG, Section IV – Job Sheets access at http://efotg.scegov.usda.gov/references/public/NE/NE_Job_Sheets_TOC_NPPH.pdf

3) A complete list of all University of Nebraska publications is available on the following web address: http://www.ianrpubs.unl.edu/epublic/pages/index.jsp.
   • Determining Crop Available Nutrient from Manure - University of Nebraska NebGuide G1335 http://www.ianrpubs.unl.edu/epublic/live/g859/build/g859.pdf.
   • Guidelines for Soil Sampling - University of Nebraska NebGuide G1740. http://www.ianrpubs.unl.edu/epublic/live/g1740/build/g1740.pdf
   • Nebraska Phosphorus Index Software (NebraskaPIndex2012v5-29-12.xls) - University of Nebraska: Livestock Waste Management Website. http://water.unl.edu/web/manure/home.
   • Nutrient Management Suggestions for Grain Sorghum - University of Nebraska NebGuide G1669 (Revised January 2013) http://www.ianrpubs.unl.edu/epublic/live/g1669/build/g1669.pdf.

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• Sugarbeet Nutrient Management - University of Nebraska NebGuide G1459 (Revised November 2012) http://www.ianrpubs.unl.edu/epublic/live/g1459/build/g1459.pdf.
• Using Starter Fertilizers for Corn, Grain Sorghum, and Soybeans - University of Nebraska NebGuide G361 (Revised October 2012). http://www.ianrpubs.unl.edu/epublic/live/g361/build/g361.pdf.

RMS

• NE-CPA-83 – Nutrient Inventory Jobsheet

STATE CONTACT

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