Washington Specification Guide
Conservation Activity Plan
Irrigation Water Management
Practice/Activity Code 118
(No.)

This specification guide is to assist the Technical Service Provider (TSP) in the interpretation of the National Criteria in the preparation of the Irrigation Water Management Plan (IWMP). It will address the critical elements that must be included to meet the participant's objectives and the CAP. The National Criteria can be found on the Washington NRCS Website within the Electronic Field Office Technical Guide (eFOTG), in Section III under the Conservation Activity Plans (CAPs) Technical Criteria.

For further guidance on NRCS's conservation planning procedures, go to: NRCS's National Planning Procedures Handbook: Title 180, Part 600 and/or Section IV of FOTG/ Non-Practice Statement of Work/ Conservation Planning Statement of Work.

For the list of NRCS *resource concerns*, the *quality criteria* for each resource concern, and acceptable *tools* for inventory and analysis of the resource concerns, go to the Washington NRCS Website within the Section III Electronic Field Office Technical Guide (eFOTG), in the Resource Quality Criteria Folder.

Section headings below correspond to the section headings contained in the National Criteria for IWM CAP's.

B. IWMP Technical Criteria. The IWMP shall include, but not limited to, the following components:

1. Farm and field information:
    a. Name of producer.
    b. Farm number.
    c. Field and/or tract number.
    d. Crops grown, and planned rotation by field.
    e. Name of contractor or consultant developing plan.
    f. Date of plan development.

2. The objectives of the producer, which should involve one of the purposes listed in Conservation Practice Standard (CPS) 449, Irrigation Water Management.

3. A map that includes field boundaries, and a soils map with the predominant soils listed and area quantified. If the qualifying acres for the plan are a subset of fields, the boundaries of the IWMP acreage should also be delineated. All maps and other visual information shall be adequately annotated and labeled following standard NRCS and/or industry conventions.

4. An irrigation system map that includes the size, materials, and locations of the

mains, laterals, and application systems.

5. Documentation of past water withdrawals and applications, by crop.

6. The methods planned to measure or quantify future water withdrawals and irrigation applications.

7. Planned water application volumes, on a seasonal and/or annual basis, and by crop.

8. Soil tests, to include nutrient levels and salinity. Water tests, to include nutrients, pathogens, salinity, pH, and trace elements.

9. Estimates of irrigation system uniformity, based on testing, evaluation, or observation. Distribution Uniformity (DU) should be based on the ratio of the average depth infiltrated in the low one-quarter of the field, to the average depth infiltrated over the entire field.

10. Documentation of the scientific method planned for scheduling the timing and amount of irrigation applications, based on the measurement or estimation of soil moisture, and the measurement or prediction of evapotranspiration (ETc) of the crop(s). The proposed irrigation scheduling method should include:
    a. Estimated volume of water applied, by field, irrigation event, season, and/or year.
    b. Estimated frequency or timing of irrigation applications, by field.
    c. Estimated application rates and depths of irrigation events.

11. An Operation and Maintenance plan, to include a check list of items to eliminate non-beneficial system losses.

12. A signature page, with names, dates and signatures of all contract holders and the person who prepared the plan. The signature page should also contain a space for approval by NRCS.

13. The IWMP components shall be assembled into one complete plan.

3.Deliverables for the Client – a hardcopy of the IWMP that includes:

1. Cover page – name, address, and phone number of producer and TSP; Total Acres of the Plan, signature blocks for the TSP, producer, and a signature block for the NRCS acceptance.

2. Soils map and appropriate soil descriptions.

3. Resource assessment results (wind and water erosion, water availability, soil fertility, and others that may be needed).

4. For management practices, the planned practices and the site specific specifications on how each practice will be applied; when the practice will be applied, and the extent (acres or number) that will be applied.

5. For structural practices, the planned practice and when it will be applied, the extent, and the location on the conservation plan map.

4. Deliverables for the NRCS Field Office:

A electronic copy of all items listed above and refer to required items in the National Criteria along with the following guidance for the State of Washington.

In addition to the National Criteria requirements a ***Digital or hard copy of a Topographic map w/ project area and if possible practice locations outlined is required.*** This map will be titled "Area of Potential Effect", have a north arrow and a scale of the map will be 1:24000 and shown in legend.

If the TSP would like to use the Conservation Plug-In software called "cplanner" offered by GeoAgro remember to get a NRCS- CPA-70 signed by your client to provide you access to their file in our Customer Service Toolkit database.

References: This section is not in the National Criteria.

- USDA-NRCS, National Engineering Handbook, Part 623, Section 15, Irrigation.
- USDA-NRCS, National Engineering Handbook, Part 652, National Irrigation Guide.
- USDA-NRCS, Washington Irrigation Guide
- National Planning Procedures Handbook: Title 180, Part 600: http://policy.nrcs.usda.gov/
- eFOTG and all its sections are found on the Washington NRCS website: http://www.wa.nrcs.usda.gov/ . The electronic Field Office Technical Guide (eFOTG) link is on the left side of the home page. Then select Washington State by clicking on it, then select your county by clicking on it, then on the left hand side select the appropriate section.
  - **Section I**: In the "Reference List" folder is the folder for "Technical Notes by Discipline" . This is where you find engineering and other discipline Technical Notes that may interest you.
  - **Section II**: Has information on soils, climate and other natural resources information that may be of use for inventory and analysis purposes.

- **Section III**: Has the "Conservation Activity Plans (CAPs) Technical Criteria" folder and the "Resource Quality Criteria for RMS" folder.
- **Section IV**: In the "Washington Conservation Practices" folder you find the folders for the individual conservation practices. In the "Non Practice Statement of Work" folder you will find the general deliverables for conservation planning.

- NRCS-CPA-70 is found on the TechReg site: http://techreg.usda.gov/static/documents/NRCS-CPA-70.pdf .
- Web Soil Survey: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm .
- Soil Data Mart: http://soildatamart.nrcs.usda.gov/.