

**POSITION DESCRIPTION
COVER SHEET**

REASON FOR THIS POSITION		
1. NEW <input checked="" type="checkbox"/>	2. IDENTICAL ADDITION TO THE ESTABLISHED PD NUMBER <input type="checkbox"/> NHQDC09	3. REPLACES PD NUMBER

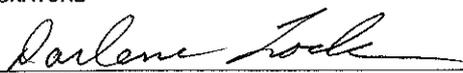
RECOMMENDED			
4. TITLE Soil Scientist	5. PAY PLAN GS	6. SERIES 0470	7. GRADE 05
8. WORKING TITLE (Optional) Soil Scientist		9. INCUMBENT (Optional)	

OFFICIAL						
10. TITLE Soil Scientist (Developmental GS-470-05/07/09)						
11. PP GS	12. SERIES 0470	13. FUNC 51	14. GRADE 05	15. DATE Month Day Year		16. I/A <input type="checkbox"/> Yes <input type="checkbox"/> No
17. CLASSIFIER						

8. ORGANIZATIONAL STRUCTURE (Agency/Bureau)			
1st	Natural Resources Conservation Service		5th
2nd			6th
3rd			7th
4th			8th

SUPERVISOR'S CERTIFICATION			
I certify that this is an accurate statement of the major duties and responsibilities of the position and its organizational relationships and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds and that false or misleading statements may constitute violations of such statute or their implementing regulations.			
19. SUPERVISOR'S SIGNATURE	20. DATE	22. SECOND LEVEL SUPERVISOR'S SIGNATURE	23. DATE
21. SUPERVISOR'S NAME AND TITLE		24. SECOND LEVEL SUPERVISOR'S NAME AND TITLE	

FACTOR EVALUATION SYSTEM					
FACTOR	25. FLD/BMK	26. POINTS	FACTOR	25. FLD/BMK	26. POINTS
1. Knowledge Required	FL 1-5	750	6. Personal Contacts	FL 6-1	
2. Supervisory Controls	FL 2-1	25	7. Purpose of Contacts	FL 7- A	30
3. Guidelines	FL 3-2	125	8. Physical Demands	FL 8-2	20
4. Complexity	FL 4-2	75	9. Work Environment	FL 9-2	20
5. Scope and Effect	FL 5-1	25	TOTAL POINTS		1065
GRADE					GS-05

CLASSIFICATION CERTIFICATION	
I certify that this position has been classified as required by Title 5, US Code, in conformance with standards published by the OPM or, if no published standard applies directly, consistently with the most applicable published standards.	
29. SIGNATURE 	30. DATE 09/15/2008
31. NAME AND TITLE Darlene Locke, Human Resources Specialist, Employment and Classification Team, Washington, D.C.	

32. REMARKS: This is a developmental position with the target GS-470-07/09 attached.	33. OPM CERTIFICATION NUMBER
OPM JFS PROFESSIONAL WORK, NATURAL RESOURCES MGT & BIOLOGICAL SCIENCES, SEPT 05 Position is FLSA – Non-Exempt.	

MASTER RECORD/INDIVIDUAL POSITION DATA
THIS SIDE TO BE COMPLETED BY THE CLASSIFIER

A. KEY DATA					
1. FUNCTION (1)	2. DEPT CD./AGCY-BUR-CD. (4)	3. SON (4)	4. MR. NO. (6)	5. GRADE (2)	6. IP NO. (8)
	AG 16				

B. MASTER RECORD					
1. PAY PLAN (2)	2. OCC. SERIES (4)	3. OCC. FUNC. CD. (2)	4. OFF. TITLE CD. (5)	5. OFFICIAL TITLE (38)	
GS	0470	51			
6. HQ. FLD. CD. (1)	7. SUP. CD. (1)		8. CLASS STD. CD. (1)	9. INTERDIS. CD. (1)	10. DT CLASS (6)
1 = HQ 2 = FLD	1 = Sup. SGEG 3 = Mgr. SGEG 4 = Sup. CSRA	5 = Mgmt. CSRA 6 = Leader LGEG 8 = All Others	X = New Standard Applied Blank = NA	N = No Y = Interdis	MO DAY YEAR
11. EARLY RET. CD. (1)		12. INACT/ACT (1)	13. DT. ABOL. (6)	14. DT. INACT/REACT (6)	15. AGENCY USE (10)
1 = Primary 2 = Secondary	3 = Foreign Svc. Blank = NA	I = Inactive A = Active	MO DAY YEAR	MO DAY YEAR	
16. INTERDISCIPLINARY SERIES (40)		(4) Per Block			
17. INTERDISCIPLINARY TITLE CODE (50)		(5) Per Block			

C. INDIVIDUAL POSITION					
1. FLSA CD. (1)	2. FIN. DIS. REQ. (1)	3. POS. SCHED. (1)	4. POS. SENS. (1)	5. COMP. LEV. (4)	
E = Exempt N = Nonexempt	0 = None 1 = CD 219 2 = CD 220	3 = SF 278 4 = AD 392 5 = SF 849	A = Sched A B = Sched B C = Sched C	0 = Excepted but not A,B,C	0 = Nonsensitive 1 = Noncritical 2 = Critical Sense
6. WK. TITLE CODE (4)	7. WK. TITLE (38)				
8. ORG. STR. CODE (18)			9. VAC REV CODE (1)		
1st	2nd	3rd	4th	5th	6th
			0 = Position Action No Vacancy A = No Change		
			B = Lower Grade C = Higher Grade		
			D = Different title and/or series E = New Position/New FTE		
10. TARGET GD.	11. LANG. REQ. (2)	12. PROJ. DTY. IND. (1)	13. DUTY STATION (9)		14. BUS. CD. (4)
		Blank = NA Y = Yes	State (2)	City (4)	County (3)
				15. DT. LST. AUDIT (6)	16. PAS. IND. (1)
				MO DAY YEAR	Blank=NA 1 = PAS
				17. DATE EST.	
				MO DAY YEAR	
18. GD. BASIS. IND (1)		7 = Equipment Devel. Guide		19. DT. REQ. REC. (6)	20. NTE. DT. (6)
1 = Rev. when vacant 2 = Impact of Person 3 = Sup./SGEG	4 = Sup./Program 5 = CD RGE 6 = Policy Analysis G E G	8 = Agency Use 9 = Agency Use ALPHAS = Agency Use		MO DAY YEAR	MO DAY YEAR
				21. POS. ST. BUD (1)	
				Y = Perm N = Other	
22. MAIN. REV./CLASS. ACT. CD. (2) (1st Digit = Activity and 2nd Digit = Results)					
Normal Act		Maintenance Review Act		Results	
3	1 = Desk Audit 2 = Sup. Audit 3 = Paper Rev. 4 = PME/Activity Rev.	5 = Desk Audit 6 = Sup. Audit 7 = Paper Rev. 8 = Panel Rev.	1 = No Action Req. 2 = Minor PD Change 3 = New PD Req. 4 = Title Change		
				5 = Series Change 6 = Pos. Upgrade 7 = Pos. Downgrade 8 = New Pos.	9 = Other
23. DATE EMP. ASGN. (6)	24. DATE ABOL. (6)	25. INACT/ACT (1)	26. DATE INACT/REACT (6)	27. ACCTG. STAT. (4)	28. INT. ASGN. SER. (4)
MO DAY YEAR	MO DAY YEAR	I = Inact. A = Act.	MO DAY YEAR		
30. CLASSIFIER'S SIGNATURE					31. DATE
					09/15/2008
32. REMARKS					
Soil Scientist, STATEMENT OF DIFFERENCES - (Not valid unless target job description is attached)					

STATEMENT OF DIFFERENCES
(Not valid unless target job description is attached)
STANDARD POSITION DESCRIPTION

Official Title: Soil Scientist
Working Title: Soil Scientist
Classification: GS-470-05

Date: August 15, 2008
Classified by: NHQ-RMD-ECT
Number: NHQSS47005

Note: This is a standard position description and can not be modified without the approval from the Human Resources Management Division, Employment and Classification Team.

INTRODUCTION

This is a developmental position designed to prepare the incumbent to assume the full scope of the target position, Soil Scientist, GS-0470-07 and GS-470-09 (attached). This position is located in a designated Major Land Resource Area (MLRA) office. The position is supervised by the Soil Survey Leader or other designated soil scientist. The incumbent serves as a member of the team developing soil survey information.

Incumbent will perform developmental assignments under supervision closer than normal until proficiency is demonstrated. Incumbent may be non-competitively promoted to the target position upon: 1) demonstrating the capacity to perform the full range of duties at the target level satisfactorily; 2) meeting all legal and regulatory requirements; 3) certification by management that the target position still exists; and 4) recommendation by the supervisor.

MAJOR DUTIES

1. Soil Identification and Mapping (60%)

- a. Identify the process to practice soil-landscape relationships to systematically map and describe the way soils occur in the landscape. Incumbent develops proficiency by working with soil scientist and with standards for soil survey, procedures, terminology, manuals, and products.
- b. Assists in examining existing soils geospatial information using geospatial technologies to identify area where soil types and landscapes are not correctly associated. With close supervision checks soil property and performance information to identify errors and data gaps, and updates computer databases of the National Soil Information System.
- c. Assists the plant scientists and the MLRA leader to document basic soil-plant relationships and to collect production estimates for crops, trees and grasses and develop other information for ecological site descriptions.

2. Technical Application (40%)

- a. Identifies the process to determine and apply the most appropriate principles, practices and methods to apply plant species identification. Use of plants as indicators of soil type, ecological sites and soil-site relationships, topographic relationships and how relief, slope and aspect indicate soil types; geomorphology and stratigraphy and their influence on soil types, parent materials and their influence on soil types. Identify other factors influencing soil type and occurrence, geospatial technologies such as GIS, GPS, Remote Sensing and NRCS Soil Survey software applications, such as training mapping and editing.
- b. Works within a team concept to develop and implement ways to improve the efficiency, effectiveness, and quality of the products and/or services provided to internal and external customers.
- c. Performs duties in a manner supportive of a safe and healthy working environment, and exercises safety precautions when exposed to dangerous objects, chemicals, extreme temperatures, etc.

3. Civil Rights

Performs duties in a manner which actively supports civil rights policies regarding personnel rules and regulations and delivery of NRCS programs and services without regard to race, color, national origin, religion, sex, age, material status, or mental or physical handicap.

Performs other related duties as assigned.

CONDITION OF EMPLOYMENT - Must possess and maintain a valid motor operator's license for the type of vehicle(s) operated to perform the duties of this position. This will require the operation of a motor vehicle on both public and private roads during daylight hours and occasionally after dark.

EVALUATION FACTORS

1. KNOWLEDGE REQUIRED BY THE POSITION – LEVEL 1-5 (750 POINTS)

- a. Professional and practical knowledge of the fundamental theories, principles, concepts and methodology of the soil science profession which provides a foundation for performance of developmental assignments and advancement to higher level work.
- b. Basic knowledge of geospatial technologies such as GIS, GPS and remote sensing.
- c. Knowledge of plant, animal, water climate, geology and other agriculture and environmental sciences. Typically this knowledge is gained through curriculum leading to a bachelor degree in soil science or a closely related field.

d. Knowledge and skill in written and oral communication techniques and public relations sufficient to explain and discuss soil survey information.

2. SUPERVISORY CONTROLS - LEVEL 2-1 (25 POINTS)

a. The supervisor instructs the incumbent on assignment's objectives, scope, limitations, specific limitations, quality and quantities expected and deadlines and priority of work efforts. Supervisor or designated soil scientist provide continually reviews work to determine the adequacy of the methods, techniques and practices applied.

b. The incumbent works closely with supervisor or designated soil scientist to complete soil survey activities and is provided detailed guidance to resolve problems and unanticipated complications.

3. GUIDELINES -LEVEL 3-2 (125 POINTS)

a. Specific written and oral guidelines directly cover assignments and are immediately available and applicable. Guidelines include National Soils Handbook, Soil Survey Manual, Soil Taxonomy, the General Manual, memorandums of understandings with other agencies, national bulletins, and any related disciplinary scientific data sources.

b. The incumbent exercises judgment at this level in selecting appropriate standards from among several alternatives and occasionally making minor adjustments to adapt the guides to specific cases.

c. The incumbent works closely with the supervisor to interpret and adapt NRCS standard guidelines (such as official soil series descriptions and NASIS interpretations) to fit specific local conditions in the area.

4. COMPLEXITY LEVEL - 4-2 (75 POINTS)

a. Assignments consist of duties which provide the incumbent with advanced experience in the methods, techniques, and practices in soil science including identifying, delineating, describing, classifying, sampling and testing different kinds of soils; excavating soil profiles; recording and editing soil data using computer technologies.

b. The incumbent with assistance of supervisor or designated soil scientist performs a complete range of soil survey activities in a survey area having complex conditions. Soils are found in a heterogeneous pattern resulting from a wide variety of geological materials and textures. Delineation's are at times difficult to determine from observable surface features and require testing of physical, chemical and morphological properties of the soil for classification and interpretation.

5. SCOPE AND EFFECT – LEVEL 5-1 (25 POINTS)

The purpose of this entry level position is to provide specific routine tasks so the incumbent will have progressive experience. Work results facilitate the work of other soil scientists.

6 & 7 PERSONAL CONTACTS – LEVEL 1A (30 POINTS)

- a. Personal – Contacts are with other soil scientists, technicians and NRCS field personnel.
- b. Purpose – The purpose of the contacts is to obtain information or clarify instructions to complete an assignment.

8. PHYSICAL DEMANDS - LEVEL 8-2 (20 POINTS)

The work is divided between office and field. Work in the field requires regular and recurring physical exertion such as walking, climbing, bending, crossing rivers and creeks, and standing in water, excavating sampling sites, and carrying equipment and heavy samples over rough terrain. Office work includes desk work and work at computer terminals.

9. WORK ENVIRONMENT- LEVEL 9-2 (20 POINTS)

The work involves moderate risks or discomforts which require special safety precautions, e.g., properly lifting a soil auger; working alone in remote areas (1 or 2 miles from the nearest road); exposure to hot and cold weather conditions; and exposure to animals and biting insects. Protective gear and clothing such as boots and gloves are normally required.

Total Points =1065 (Range GS-05 – 855-1100)

This position is determined to be non-exempt from the provision in the FLSA as defined in 5 CFR 551.204.

**POSITION DESCRIPTION
COVER SHEET**

REASON FOR THIS POSITION		
1. NEW <input checked="" type="checkbox"/>	2. IDENTICAL ADDITION TO THE ESTABLISHED PD NUMBER <input type="checkbox"/> NHQSS07	3. REPLACES PD NUMBER

RECOMMENDED			
4. TITLE Soil Scientist	5. PAY PLAN GS	6. SERIES 0470	7. GRADE 07
8. WORKING TITLE (Optional) Soil Scientist		9. INCUMBENT (Optional)	

OFFICIAL						
10. TITLE Soil Scientist (Developmental GS-470-05/07/09)						
11. PP GS	12. SERIES 0470	13. FUNC 51	14. GRADE 07	15. DATE Month Day Year		16. I/A <input type="checkbox"/> Yes <input type="checkbox"/> No
						17. CLASSIFIER

8. ORGANIZATIONAL STRUCTURE (Agency/Bureau)			
1st	Natural Resources Conservation Service	5th	
2nd		6th	
3rd		7th	
4th		8th	

SUPERVISOR'S CERTIFICATION			
I certify that this is an accurate statement of the major duties and responsibilities of the position and its organizational relationships and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds and that false or misleading statements may constitute violations of such statute or their implementing regulations.			
19. SUPERVISOR'S SIGNATURE	20. DATE	22. SECOND LEVEL SUPERVISOR'S SIGNATURE	23. DATE
21. SUPERVISOR'S NAME AND TITLE		24. SECOND LEVEL SUPERVISOR'S NAME AND TITLE	

FACTOR EVALUATION SYSTEM					
FACTOR	25. FLD/BMK	26. POINTS	FACTOR	25. FLD/BMK	26. POINTS
1. Knowledge Required	FL 1-6	950	6. Personal Contacts	FL 6-2	
2. Supervisory Controls	FL 2-2	125	7. Purpose of Contacts	FL 7- B	75
3. Guidelines	FL 3-2	125	8. Physical Demands	FL 8-2	20
4. Complexity	FL 4-2	75	9. Work Environment	FL 9-2	20
5. Scope and Effect	FL 5-2	75	TOTAL POINTS		1465
GRADE					GS-07

CLASSIFICATION CERTIFICATION	
I certify that this position has been classified as required by Title 5, US Code, in conformance with standards published by the OPM or, if no published standard applies directly, consistently with the most applicable published standards.	
29. SIGNATURE 	30. DATE 09/15/2008

31. NAME AND TITLE Darlene Locke, Human Resources Specialist, Employment and Classification Team, Washington, D.C.
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32. REMARKS: This is a developmental position with the target GS-470-09 attached.	33. OPM CERTIFICATION NUMBER
OPM JFS PROFESSIONAL WORK, NATURAL RESOURCES MGT & BIOLOGICAL SCIENCES, SEPT 05 Position is FLSA – Non-Exempt.	

MASTER RECORD/INDIVIDUAL POSITION DATA
THIS SIDE TO BE COMPLETED BY THE CLASSIFIER

A. KEY DATA					
1. FUNCTION (1)	2. DEPT CD./AGCY-BUR-CD. (4)	3. SON (4)	4. MR. NO. (6)	5. GRADE (2)	6. IP NO. (8)
	AG 16				

B. MASTER RECORD					
1. PAY PLAN (2)	2. OCC. SERIES (4)	3. OCC. FUNC. CD. (2)	4. OFF. TITLE CD. (5)	5. OFFICIAL TITLE (38)	
GS	0470	51			
6. HQ. FLD. CD. (1)	7. SUP. CD. (1)	8. CLASS STD. CD. (1)		9. INTERDIS. CD. (1)	10. DT CLASS (6)
1 = HQ 2 = FLD	1 = Sup. SGE 3 = Mgr. SGE 4 = Sup. CSRA	5 = Mgmt. CSRA 6 = Leader LGE 8 = All Others	X = New Standard Applied Blank = NA	N = No Y = Interdis	MO DAY YEAR
11. EARLY RET. CD. (1)	12. INACT/ACT (1)	13. DT. ABOL. (6)	14. DT. INACT/REACT (6)	15. AGENCY USE (10)	
1 = Primary 2 = Secondary	1 = Inactive A = Active	MO DAY YEAR	MO DAY YEAR		
16. INTERDISCIPLINARY SERIES (40)		(4) Per Block			
17. INTERDISCIPLINARY TITLE CODE (50)		(5) Per Block			

C. INDIVIDUAL POSITION										
1. FLSA CD. (1)	2. FIN. DIS. REQ. (1)	3. POS. SCHED. (1)	4. POS. SENS. (1)	5. COMP. LEV. (4)						
E = Exempt N = Nonexempt	0 = None 1 = CD 219 2 = CD 220	3 = SF 278 4 = AD 392 5 = SF 849	A = Sched A B = Sched B C = Sched C	0 = Excepted but not A,B,C	0 = Nonsensitive 1 = Noncritical 2 = Critical Sense					
6. WK. TITLE CODE (4)	7. WK. TITLE (38)									
8. ORG. STR. CODE (18)				9. VAC REV CODE (1)						
1st	2nd	3rd	4th	5th	6th	7th	8th	0 = Position Action No Vacancy A = No Change	B = Lower Grade C = Higher Grade	D = Different title and/or series E = New Position/New FTE
10. TARGET GD.	11. LANG. REQ. (2)	12. PROJ. DTY. IND. (1)	13. DUTY STATION (9)			14. BUS. CD. (4)	15. DT. LST. AUDIT (6)	16. PAS. IND. (1)	17. DATE EST.	
		Blank = NA Y = Yes	State (2)	City (4)	County (3)		MO DAY YEAR	Blank=NA 1 = PAS	MO DAY YEAR	
18. GD. BASIS. IND (1)			7 = Equipment Devel. Guide			19. DT.REQ. REC. (6)		20. NTE. DT. (6)		21. POS.ST. BUD (1)
1 = Rev. when vacant 2 = Impact of Person 3 = Sup./SGEG			4 = Sup./Program 5 = RGE 6 = Policy Analysis G E G ALPHAS = Agency Use			MO DAY YEAR		MO DAY YEAR		Y = Perm N = Other
22. MAIN. REV./CLASS.ACT. CD. (2) (1st Digit = Activity and 2nd Digit = Results)										
Normal Act		Maintenance Review Act		Results						
1 = Desk Audit 2 = Sup. Audit 3 = Paper Rev. 4 = PME/Activity Rev.		5 = Desk Audit 6 = Sup. Audit 7 = Paper Rev. 8 = Panel Rev.		1 = No Action Req. 2 = Minor PD Change 3 = New PD Req. 4 = Title Change		5 = Series Change 6 = Pos. Upgrade 7 = Pos. Downgrade 8 = New Pos.		9 = Other		
23. DATE EMP. ASGN. (6)		24. DATE ABOL. (6)		25. INACT/ACT(1)	26. DATE INACT/REACT (6)		27. ACCTG. STAT. (4)	28. INT. ASGN. SER. (4)		29. AGENCY USE (8)
MO DAY YEAR		MO DAY YEAR		I = Inact. A = Act.	MO DAY YEAR					
30. CLASSIFIER'S SIGNATURE									31. DATE	
									09/15/2008	
32. REMARKS										
Soil Scientist, STATEMENT OF DIFFERENCES - (Not valid unless target job description is attached)										

Standard Position Description
STATEMENT OF DIFFERENCES
(Not valid unless target job description is attached)

Official Title: Soil Scientist
Working Title: Soil Scientist
Classification: GS-470-07

Date: June 19, 2008
Classified by: NHQ-RMD-ECT
Number: NHQSS47007

Note: This is a standard position description and can not be modified without the approval from the Human Resources Management Division, Employment and Classification Team.

INTRODUCTION

This is a developmental position designed to prepare the incumbent to assume the full scope of the target position, Soil Scientist, GS-470-09 (attached). This position is located in a designated Major Land Resource Area (MLRA) office. The position is supervised by the Soil Survey Leader. The incumbent serves as a member of the team developing soil survey information.

Incumbent will perform developmental assignments under supervision closer than normal until proficiency is demonstrated. Incumbent may be non-competitively promoted to the target position upon: 1) demonstrating the capacity to perform the full range of duties at the target level satisfactorily; 2) meeting all legal and regulatory requirements; 3) certification by management that the target position still exists; and 4) recommendation by the supervisor.

MAJOR DUTIES

1. Soil Identification and Mapping (50%)

a. Practice soil-landscape relationship to systematically map and describe the way soils occur in the landscape. Incumbent develops proficiency with standards for soil survey, and procedures, terminology, manuals, and products.

b. Identifies and acquires the appropriate spatial data layers necessary to create and maintain a soils map digitally. Incumbent acquires the knowledge and skill to use geospatial technologies to manipulate digital and analog geospatial data such as soil survey and soil investigations, climate, vegetation, geology, land use, topography and order to examine, tentatively identify and delineate areas of different kinds of soils.

c. Examines existing soils geospatial information using geospatial technologies to identify area where soil types and landscapes are not correctly associated. Checks soil property and performance information to identify errors and data gaps, and updates computer databases of the National Soil Information System.

d. Assists the plant scientists and the MLRA leader to document soil-plant relationships and to collect production estimates for crops, trees and grasses and develop other information for ecological site descriptions. Incumbent assists in preparing publications and reports on soil surveys and in the preparation of various soil interpretations.

2. Technical Application (50%)

a. Determines and applies the most appropriate principles, practices and methods to apply plant species identification and the use of plants as indicators of soil type, ecological sites and soil-site relationships, topographic relationships and how relief, slope and aspect indicate soil types; geomorphology and stratigraphy and their influence on soil types, parent materials and their influence on soil types and other factors influencing soil type and occurrence, geospatial technologies such as GIS, GPS, Remote Sensing and agency Soil Survey software applications, such as training mapping and editing.

b. Works within a team concept to develop and implement ways to improve the efficiency, effectiveness, and quality of the products and/or services provided to internal and external customers.

c. Performs duties in a manner supportive of a safe and healthy working environment, and exercises safety precautions when exposed to dangerous objects, chemicals, extreme temperatures, etc.

3. Civil Rights

Performs duties in a manner which actively supports civil rights policies regarding personnel rules and regulations and delivery of NRCS programs and services without regard to race, color, national origin, religion, sex, age, marital status, or mental or physical handicap.

Performs other related duties as assigned.

CONDITION OF EMPLOYMENT - Must possess and maintain a valid motor operator's license for the type of vehicle(s) operated to perform the duties of this position. This will require the operation of a motor vehicle on both public and private roads during daylight hours and occasionally after dark.

EVALUATION FACTORS

1. KNOWLEDGE REQUIRED BY THE POSITION – LEVEL 1-6 (950 POINTS)

a. Professional and practical knowledge of the fundamental theories, principles, concepts and methodology of the soil science profession which provides a foundation for performance of developmental assignments and advancement to higher level work.

b. Knowledge of geospatial technologies such as GIS, GPS and remote sensing.

c. Knowledge of plant, animal, water climate, geology and other agriculture and environmental sciences. Typically this knowledge is gained through curriculum leading to a bachelor degree in soil science or a closely related field.

d. Knowledge and skill in written and oral communication techniques and public relations sufficient to explain and discuss soil survey information or give technical guidance to other NRCS employees and individual landowners and land users.

e. Familiarity with related fields in order to adapt standard practices and to recognize discrepancies and deviations.

2. SUPERVISORY CONTROLS - LEVEL 2-2 (125 POINTS)

a. The supervisor instructs the incumbent on assignment's objectives, scope, limitations, specific limitations, quality and quantities expected and deadlines and priority of work efforts. Supervisor periodically reviews work to determine the adequacy of the methods, techniques and practices applied, their sequence and interrelationships, attainment of operational objectives, and compliance with NRCS technical standards.

b. The incumbent works independently with soil survey activities and is provided additional guidance to resolve problems and unanticipated complications.

3. GUIDELINES -LEVEL 3-2 (125 POINTS)

a. Specific written and oral guidelines directly cover assignments and are immediately available and applicable. Guidelines include National Soils Handbook, Soil Survey Manual, Soil Taxonomy, the General Manual, memorandums of understandings with other agencies, national bulletins, and any related disciplinary scientific data sources.

b. The incumbent exercises judgment at this level in selecting appropriate standards from among several alternatives and occasionally making minor adjustments to adapt the guides to specific cases.

c. The incumbent works closely with the supervisor to interpret and adapt NRCS standard guidelines (such as official soil series descriptions and NASIS interpretations) to fit specific local conditions in the area.

4. COMPLEXITY LEVEL - 4-2 (75 POINTS)

a. Assignments consist of duties which provide the incumbent with advanced experience in the methods, techniques, and practices in soil science including identifying, delineating, describing, classifying, sampling and testing different kinds of soils; excavating soil profiles; recording and editing soil data using computer technologies.

b. The incumbent with assistance of supervisor performs a complete range of soil survey activities in a survey area having complex conditions. Soils are found in a heterogeneous pattern resulting from a wide variety of geological materials and textures. Delineation's are at times difficult to determine from observable surface features and require testing of physical, chemical and morphological properties of the soil for classification and interpretation.

5. SCOPE AND EFFECT – LEVEL 5-2 (75 POINTS)

The purpose of this advanced developmental assignment work is to provide the incumbent with progressive experience through specific limited tasks that are designed to prepare the individual for more complex soil science duties. Works results affect the overall performance of soil science efforts by higher grade soil scientists.

6 & 7 PERSONAL CONTACTS – LEVEL 2B (75 POINTS)

a. Personal contacts are with employees in the NRCS inside and outside the immediate office such as soil scientists, soil conservationists, engineers, technicians, etc. Contacts are also made with individual landowners, members of civic groups and students. Contacts are generally routine and within a structural setting.

b. Purpose of the contacts are to seek permission to conduct soil surveys and to exchange information regarding the soil survey and related activities. Individuals, community and government representatives contacted at this level are pursuing mutual goals and are generally cooperative.

8. PHYSICAL DEMANDS - LEVEL 8-2 (20 POINTS)

The work is divided between office and field. Work in the field requires regular and recurring physical exertion such as walking, climbing, bending, crossing rivers and creeks, and standing in water, excavating sampling sites, and carrying equipment and heavy samples over rough terrain. Office work includes desk work and work at computer terminals.

9. WORK ENVIRONMENT- LEVEL 9-2 (20 POINTS)

The work involves moderate risks or discomforts which require special safety precautions, e.g., properly lifting a soil auger; working alone in remote areas (1 or 2 miles from the nearest road); exposure to hot and cold weather conditions; and exposure to animals and biting insects. Protective gear and clothing such as boots and gloves are normally required.

Total Points = 1465 (Range GS-07 – 1355-1600)

This position is determined to be non-exempt from the provision in the FLSA as defined in 5 CFR 551.204.

**POSITION DESCRIPTION
COVER SHEET**

REASON FOR THIS POSITION		
1. NEW <input checked="" type="checkbox"/>	2. IDENTICAL ADDITION TO THE ESTABLISHED PD NUMBER <input type="checkbox"/> NHQSS09	3. REPLACES PD NUMBER

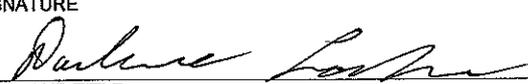
RECOMMENDED			
4. TITLE Soil Scientist	5. PAY PLAN GS	6. SERIES 0470	7. GRADE 09
8. WORKING TITLE (Optional) Soil Scientist		9. INCUMBENT (Optional)	

OFFICIAL						
10. TITLE Soil Scientist						
11. PP GS	12. SERIES 0470	13. FUNC 51	14. GRADE 09	15. DATE Month Day Year		16. I/A <input type="checkbox"/> Yes <input type="checkbox"/> No
						17. CLASSIFIER

8. ORGANIZATIONAL STRUCTURE (Agency/Bureau)			
1st	Natural Resources Conservation Service		5th
2nd			6th
3rd			7th
4th			8th

SUPERVISOR'S CERTIFICATION			
I certify that this is an accurate statement of the major duties and responsibilities of the position and its organizational relationships and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds and that false or misleading statements may constitute violations of such statute or their implementing regulations.			
19. SUPERVISOR'S SIGNATURE	20. DATE	22. SECOND LEVEL SUPERVISOR'S SIGNATURE	23. DATE
21. SUPERVISOR'S NAME AND TITLE		24. SECOND LEVEL SUPERVISOR'S NAME AND TITLE	

FACTOR EVALUATION SYSTEM					
FACTOR	25. FLD/BMK	26. POINTS	FACTOR	25. FLD/BMK	26. POINTS
1. Knowledge Required	FL 1-6	950	6. Personal Contacts	FL 6-3	
2. Supervisory Controls	FL 2-3	275	7. Purpose of Contacts	FL 7- B	110
3. Guidelines	FL 3-3	275	8. Physical Demands	FL 8-2	20
4. Complexity	FL 4-3	150	9. Work Environment	FL 9-2	20
5. Scope and Effect	FL 5-3	150	TOTAL POINTS		1950
GRADE					GS-09

CLASSIFICATION CERTIFICATION	
I certify that this position has been classified as required by Title 5, US Code, in conformance with standards published by the OPM or, if no published standard applies directly, consistently with the most applicable published standards.	
29. SIGNATURE 	30. DATE 09/15/2008

31. NAME AND TITLE
Darlene Locke, Human Resources Specialist, Employment and Classification Team, Washington, D.C.

32. REMARKS: OPM JFS PROFESSIONAL WORK, NATURAL RESOURCES MGT & BIOLOGICAL SCIENCES, SEPT 05 Position is FLSA - Non-Exempt.	33. OPM CERTIFICATION NUMBER
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Standard Position Description

Official Title: Soil Scientist
Working Title: Soil Scientist
Classification: GS-470-09

Date: July 07, 2008
Classified by: NHQ-HRMD-ECT
Number: NHQSS47009

Note: This is a standard position description and can not be modified without the approval from the Human Resources Management Division, Employment & Classification Team, Washington D.C.

INTRODUCTION

This position is located in a designated Major Land Resource Area (MLRA) office. The position is supervised by the Soil Survey Leader. The incumbent serves as a member of the team developing soil survey information.

MAJOR DUTIES

1. Data Collection (50%)

- a. Identifies and acquires the appropriate special data layers necessary to create and maintain a soils map digitally. Incumbents works with geospatial technologies to manipulate digital and analog geospatial data such as soil survey and soil investigations, climate, vegetation, geology, land use, topography and order to examine, tentatively identify and delineate areas of different kinds of soils.
- b. Uses soil-landscape relationships to systematically map and describe the way soils occur in the landscape. Incumbent assists the MLRA Soil Survey Leader to develop soil landscape predictive models.
- c. Studies the characteristics of soils, geology, topography, and landforms over a large geographic region (MLRA) in order to ensure consistency of map units throughout. Assists MLRA Soil Survey Leader in evaluating map units of survey area in order to plan the most feasible method of updating map units to current standards and support the NCSS objective of a seamless digital soil survey of the nation.
- d. Examines existing soils geospatial information using geospatial technologies to identify areas where soil types and landscapes are not correctly associated. Examines soil property and performance information to identify and correct errors and gaps in data. Tests and validates data for the survey area and updates computer databases of the National Soil Information System.
- e. Records soil data on digital or hard copy aerial photographs. Documents soil information according to standard procedures and methods in digital or paper formats. Statistically analyzes data, correlates new map units which are coordinated on an MLRA (geographic) basis to provide more accurate interpretations for soil management.

2. Technical Application (50%)

- a. Writes technical and nontechnical materials dealing with soils and the soil survey; assists in the development of soil surveys publications and reports. Drafts and revises map unit description, soil series descriptions and other materials, as assigned
- b. Works with plant scientists and the MLRA leader to document soil-plant relationships and to collect production estimates for crops, trees and grasses and develop other information for ecological site descriptions.
- c. Works with a team concept to develop and implement ways to improve the efficiency, productivity and quality of the Soil Survey and products and/or services provided to internal and external customers.
- d. Performs duties in a manner supportive of a safe and healthy working environment, and exercises safety precautions when exposed to dangerous objects, chemicals, extreme temperatures, etc.

3. Civil Rights

Performs duties in a manner which actively support civil rights policies regarding personnel rules and regulations and delivery of NRCS programs and services without regard to race, color, national origin, religion, sex, age, material status or mental or physical handicap.

Performs other duties as assigned.

CONDITION OF EMPLOYMENT – Must possess and maintain a valid motor operator's license for the type of vehicle(s) operated to perform the duties of this position. This will require the operation of a motor vehicle on both public and private roads during daylight hours and occasionally after dark.

Competitive Level –(Designated by State)

EVALUATION FACTORS

1. KNOWLEDGE REQUIRED BY THE POSITION - LEVEL 1-6 (950 POINTS)

- a. Knowledge of soil-landscape relationships, soil properties, soil genesis and morphology, geomorphology, soil classification, soil interpretation, and soil-plant and ecosystem relationships in order to systematically map and describe soil landscape catena's.
- b. Knowledge of National Cooperative Soil Survey (NCSS) guidelines, policies, and procedures in order to complete work according to technical standards.

c. Knowledge of geographic information systems (GIS), global positioning systems (GPS), remote sensing, soil landscape predictive models and other geospatial technologies in order to produce quality soil surveys that supports the NCSS objective of a seamless digital soil survey of the nation.

d. Skill in using computer programs used for word processing, developing spreadsheets, managing databases in order to use and maintain National Soil Information System (NASIS) applications and prepare soil survey reports.

e. Ability to communicate with other (e.g., orally, TTY, sign language or lip reading, and in writing, etc.) in order to write and present technical material.

2. SUPERVISORY CONTROLS –LEVEL 2-3 (275 POINTS)

a. The incumbent works under the supervision of the MLRA Soil Survey Leader. The supervisory outlines or discusses possible problem areas and defines objectives, plans, priorities, and deadlines. Occasional checks are made while work is in progress. Completed work is reviewed for adequacy, accuracy, and conformance to guidelines.

b. The incumbent independently plans and carries out assignments, referring unusual problems to the supervisor.

3. GUIDELINES LEVEL – 3-3 (275 POINTS)

a. The incumbent uses a wide variety of reference materials and manuals to include plan of operations, the Soil Survey Memorandum of Understanding, Soil Taxonomy, Soil Survey Manual, National Soil Survey Handbook, Field Book for Describing Soils, state guides, any national and state memoranda which outline policies, procedures, and technical standards.

b. Independent judgment is used interpreting the guidelines based on precedents. When guidelines are not applicable and alternatives are unclear, the employee will seek advice from the supervisor.

4. COMPLEXITY- LEVEL 4-3 (150 POINTS)

a. Participates fully in all phase of the soil survey. The assigned work area is one of diverse topographic conditions. Geology, geomorphic surfaces, and soils are varied and complex and the landforms change across the MLRA.

b. The incumbent must apply and adapt established guidelines and procedures to the survey operations, and use judgment based on experience and past applications when adapting to new situations.

c. The work involves soil surveying and writing soil descriptions in soil survey areas where guides are well established, and evaluating published soil survey maps and collecting transect data as part of maintenance activities of the MLRA soil survey.

5. SCOPE AND EFFECT-LEVEL 5-3 (150 POINTS)

a. The purpose of this position is to provide accurate and complete soil survey information that can be used by local, state, federal, and tribal officials and agencies, and the general public in planning land use and utilizing soil and land related resources.

b. The interpretations have an important impact in determining and use. The incumbent's work affects the creditability of the agency. Completed work supports the efforts and activities of the MLRA Soil Survey Office the NCSS objective of a seamless digital soil survey of the nation.

6 & 7 PERSONAL CONTACTS – LEVEL 3B (110 POINTS)

a. Contacts are with landowners and operators, NRCS personnel, state and local government representatives, representatives of other federal agencies, and other agencies cooperating in the soil survey. Contacts are made in person and over the telephone.

b. The purpose of contacts is to exchange and/or present information, to render technical assistance, or to obtain permission to map or sample soils in the survey area.

8. PHYSICAL DEMANDS - LEVEL 8-2 (20 POINTS)

The work is divided between office and field. Work in the field requires regular and recurring physical exertion such as walking, climbing, bending, crossing rivers and creeks, and standing in water, excavating sampling sites, and carrying equipment and heavy samples over terrain. Office work includes desk work and a work at computer terminals. The ability to operate a motor vehicle is essential. The incumbent must be in possession of a valid state driver's license.

9. WORK ENVIRONMENT-LEVEL (20 POINTS)

The work involves moderate risks or discomforts which require special safety precautions, e.g., properly lifting a soil auger; working alone in remote areas(1 or 2 miles from the nearest road); exposure to hot and cold weather conditions; and exposure to animals and biting insects. Protective gear and clothing such as boots and gloves are normally required.

Total Points = 1950 (Range GS-09 -1856-2100)

This position is determined to be non-exempt from the provisions of the Fair Labor Standards Act as defined in 5 CFR 551.204