

NATURAL  
RESOURCES  
CONSERVATION  
SERVICE



## Strategic Human Capital Plan

2004-2008

### WORKFORCE PLANNING

*The RIGHT People*

- in the *RIGHT Place*
- at the *RIGHT Time*
- doing the *RIGHT Job*

## ***EXECUTIVE SUMMARY***

Over the past several years, NRCS has taken a number of proactive steps to prepare for workforce changes. NRCS continues to improve in the area of information technology, implementation of best practices, and e-government initiatives. Significant emphasis has been placed in the design, development, and implementation of automated tools to ensure that leadership can readily access data regarding the workforce. It is critical that the Agency has integrated tools to conduct agency-wide workforce analysis of pertinent employee data including Human Capital/Workforce Planning, Skills, organizational, and position management.

The mission of the Natural Resources Conservation Service (NRCS) is to provide leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment. In the Natural Resources Conservation Service (NRCS), people are the most important asset. This Human Capital Plan coupled with the workforce planning process results in strategies that align the workforce to achieve the Agency's strategic plan to ensure the right people are in the right place, at the right time, doing the right things to achieve the Agency's strategic goals.

This Plan helps forecast future conditions and develops objectives and programs to meet the identified workforce needs. It also provides a clear rationale for linking recruitment, training, employee development, and other human resource programs to the organization's short and long-term goals and objectives. The Plan commits NRCS to the following strategic planning goals and assumptions:

### **STRATEGIC PLANNING GOALS:**

- Enhance the productive capacity of soil and water resources to enable a strong agricultural and natural resource sector
- Reduce unintended adverse effects of natural resources development and use to ensure a high quality environment
- Reduce risks from drought and flooding to protect individual and community health and safety
- Deliver high quality services to the public to enable natural resource stewardship

### **ASSUMPTIONS:**

- Budget Projections
  - Based on funding levels by program
  - OMB pay and inflation rates for each fiscal year increase slightly in 2004 & 2005; bigger increases in 2006-2008 due to the Farm Bill
- Hiring – diverse combination of permanent and other than permanent positions
- Employees will need to have more computer knowledge and analytical skills to assist local and remote users
- Technical Service Providers (TSP) will augment technical service delivery and will not replace present delivery system
- NRCS will become an enabler of conservation technical service delivery
- Human Capital plan is based upon the agency's 2003 strategic plan update
- Retirement attrition calculated based on CSRS formula
- Competitive Sourcing is not a factor in determining workforce needs

## ***FINDINGS***

NRCS workforce is comprised of a technically sound workforce. The core technical workforce must possess technical expertise in a wide range of disciplines to effectively carry out the Agency's mission and strategic goals. Key findings of the workforce's current state include:

- Attrition Projections
  - Average age of the workforce is 45
  - 12% of the workforce is eligible to retire in fiscal year 2003
  - 31% of the workforce (approximately 3500 employees) is eligible to retire within the next 5 years
  
- Impacts of Farm Bills and A-76 Competitive Sourcing
  - Skills – greater emphasis in the area of contracting, engineering, analysis, accounting, etc.
  - Competitive sourcing – 50% of the workforce will be assessed over the next 5 years
  - Technical Service Providers – the registry contains over 1100 certified individuals to supplement the workforce
  
- Improved Systems
  - Enhanced tools will be needed to aid the workforce in carrying out the Agency's mission
  - Reliable, efficient electronic systems are critical to streamline repetitive tasks and retrieve information

NRCS' current attrition rate is 2-4 percent. Due to the current state of the economy, it is unlikely that the workforce will reduce as rapid as employee retirement eligibility projections indicate. However, the Agency needs to be in a position to address the workforce attrition as it occurs.

## ***CONCLUSION***

The Plan is a guide for leadership to use as a foundation for workforce decisions. Implementation of the Human Capital Management components will provide the framework for NRCS to be successful in accomplishing its mission. The plan provides managers and leaders in NRCS, as well as its partners, with the information they need to identify the skills, diversity, and training that will be required to achieve the Agency's strategic and program goals.

## ***AGENCY OVERVIEW***

The mission of the Natural Resources Conservation Service (NRCS) is to provide leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment. NRCS' major mission functions include Conservation Planning, Application and Maintenance of Conservation Systems, Providing Financial Incentives, Resource Assessment and Technology Development, Information and Outreach, and the administrative and management activities necessary to carry out these functions.

NRCS is a line and staff organization. There are five deputy areas headed by senior executives and three regional assistant chiefs, also senior executives, who provide supervision to the 50 state conservationists/directors. NRCS employees work with the employees of Federal and non-Federal agencies, volunteers, non-profit organizations, and contract employees in a delivery system that carry out the NRCS employees work with the employees of Federal and non-Federal agencies, volunteers, non-profit organizations, and contract employees in a delivery system that carries out the Nation's conservation agenda on private lands.

The Agency is recognized as USDA's technical expert in natural resources conservation planning and application. It is incumbent upon the Agency to continue to be the leader in development, deployment, and technology transfer of the latest science based practices and tools.

Major changes in the nature of agriculture have occurred. The array of conservation issues have grown with changes in the business practices of agriculture and in farm and forest management practices and a greater public concern of conservation issues. These issues include: nutrient management, pesticide use and runoff; diminishing open space; greenhouse emission and carbon sequestration; water conservation; drought and flood mitigation; air quality; energy production and conservation; wetland restoration and protection; and non-nutrient animal waste concerns, such as water-born pathogens and antibiotic-resistant bacteria.

Farm policies enacted by Congress beginning in 1985, 1990, 1996, and 2002, have greatly expanded NRCS's technical assistance role on the Nation's private land. The Agency has strived to respond to these emerging issues in such a way that the public's investment in conservation technologies yield recommendations based on best science. Overall, NRCS has been challenged to make investments in technology and deliver its technology and other services, even as programmatic responsibilities have increased since the 1985 Farm Bill.

The Farm Security and Rural Investment Act of 2002 authorized USDA to use Technical Service Providers to perform conservation work. The assignment of this function, along with other facets of this Act, have caused NRCS to realign functions to address the changing demands and mission of the agency and to better meet our customers' needs.

On May 5, 2004, the Natural Resources Conservation Service (NRCS) announced a reorganization effort designed to streamline the agency to better meet the growing demands for NRCS services. The purpose of the NRCS reorganization was to strengthen multi-disciplinary technology support to States; consolidate similar functions to enhance communication and coordination; align human capital resources with mission, goals, and organizational objectives; streamline processes and procedures; provide an improved career ladder for technical personnel; and better balance Deputy areas and workload at the national level. With the constant change in technology and conservation issues, it was imperative to realign and consolidate similar functions to meet the goals and mission of the agency. The reorganization helped to re-focus the Agency's resources to provide better customer service and make the Agency more efficient in the management of programs and operations.

By September 7, 2004, all three new National Technology Support Centers were operational and employees impacted by the reorganization started in new positions. NRCS was able to maintain much of our intellectual expertise during the reorganization. Out of 167 employees impacted by the reorganization 134 chose to remain with the Agency. For those who chose other options, NRCS provided a wide array of personnel tools to ease the transition including pay retention for employees who voluntarily took a lower graded position within NRCS, Voluntary Early Retirement Authority, reasonable accommodations and hardship requests were considered, and Transitional Services (counseling, assistance with resumé and cover letter writing, skills assessment to identify strengths, interview tips, and job search assistance) were provided. In addition, the Employee Assistance Program was available. More details on the new NRCS structure can be found at <http://www.nrcs.usda.gov/about/>

NRCS has a challenging future. Like many other federal agencies, NRCS is facing program changes, shifting customer needs, a diminishing workforce, competitive sourcing and Technical Service Providers initiatives. Meeting these challenges will require more than hiring additional people. It will require cultivating the people we have along with our partners.

## ***STRATEGIC ISSUES IMPACTING WORKFORCE NEEDS***

The mission of the Natural Resources Conservation Service is to provide leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment. In essence, employees of the Agency help people care for the land. Private landowners and land managers are the decision makers and stewards of their land and water. Our role is to provide national leadership in addressing resource problems and opportunities that cannot be addressed by individuals alone or by government below the Federal level.

In carrying out this mission, the Agency works to achieve four broad goals:

1. Enhance the productive capacity of soil and water resources to enable a strong agricultural and nature resource sector.
2. Reduce unintended adverse effects of natural resources development and use to ensure a high quality environment.
3. Reduce risks from drought and flooding to protect individual and community health and safety.
4. Deliver high quality services to the public to enable natural resource stewardship.

To achieve the four strategic goals listed above, the Agency developed four fundamental principles that guide how NRCS conducts business today and will continue to conduct business in the future.

1. **Service** – The agency serves, either directly or indirectly, all of the people of the Nation. Our customers are entitled to the best service we can provide. We will respect the dignity and worth of every person we work with, treat individuals fairly and equitably, listen to their views, and respond with assistance that is tailored to their needs and is technically accurate.
2. **Partnership** – The agency recognizes that conservation can be achieved only by the cooperative effort of agencies, organizations, and individuals across the Nation.
3. **Community Action** – The agency believes that a locally led, watershed-based, voluntary approach to resource management on private lands is key to conserving natural resources.
4. **Technical Excellence** – NRCS's success depends upon the technical expertise of its employees and volunteers of its employees and volunteers and upon their ability to work effectively with our diverse customer base.

## *MANAGEMENT STRATEGIES*

Good management of internal business processes and agency resources is essential to efficient program operations that provide high-quality customer service and effective use of the taxpayers' money. Over the next few years, the Agency will focus on implementing the management strategies that the President's Management Agenda has identified as key to improving the effectiveness and accountability of the Federal government as a whole. The initiatives outlined in the President's Management Agenda are included in the Agency's annual business plan and in annual operating plans at all levels. Implementation of these initiatives will enable the Agency to:

1. Maintain an efficient, high-performing, diverse workforce, aligned with mission priorities and working cooperatively with our partners and the private sector.
2. Make effective use of electronic information management systems to minimize the administrative workload of employees and enable them to provide better service to customers.
3. Improve accountability and performance reporting processes within the agency.

The Agency convened a group of subject matter experts from across the agency to develop issues related to workforce planning needs, how those needs addressed the Agency's strategic goals, the outcome of those goals, and the disciplines needed to carry out the strategic goals.

The following tables illustrate the results of their efforts. It should be noted that the management strategies are overarching goals of the strategic plan.

## **STRATEGIC GOALS**

<b>Workforce Planning Issue:</b>	<b>Strategic Plan Linkage:</b>	<b>Outcome:</b>	<b>Strategies:</b>	<b>Workforce Requirements - Disciplines:</b>
<p><b>Issue 1:</b> Working lands are degrading and require conservation treatment to sustain productive capacity.</p>	<p><b>Strategic Goal #1:</b> Enhance natural resource productivity to enable a strong agricultural and natural resource sector.</p>	<p>809 million acres of working lands will be treated to provide sustainable productive capacity.</p>	<p>1. 76.0 million acres of crop, grazing, and forest lands will be treated annually. 2. Effectively implement Agency's 2004 reorganization plan to provide technologies delivery and transfer.</p>	<p>1. Soil Conservationist 2. Engineer 3. Conservation Technician 4. Soil Scientist 5. Range Conservationist 6. Forester 7. Civil Eng Technician 8. Agronomist 9. Contract Specialist 10. Computer Specialist 11. Outreach Coordinator</p>
<p><b>Issue 2:</b> Adverse effects of natural resource development are detrimental to a high quality environment.</p>	<p><b>Strategic Goal #2:</b> Reduce unintended adverse effects of natural resource development and use to ensure a high quality environment.</p>	<p>Protect 1.2 million acres of farmland from conversion to non-agricultural uses.</p>	<p>1. Provide technical assistance and information to local, state and tribal governments. 2. Effectively implement Agency's 2003 organization plan to provide technologies delivery and transfer.</p>	<p>1. Soil Conservationist 2. Engineer 3. Conservation Technician 4. Range Conservationist 5. Civil Eng Technician 6. Contract Specialist 7. Natural Resource Specialist 8. Community Planner 9. Biologist 10. GIS Specialist 11. Outreach Coordinator</p>

**STRATEGIC GOALS**

<b>Workforce Planning Issue:</b>	<b>Strategic Plan Linkage:</b>	<b>Outcome:</b>	<b>Strategies:</b>	<b>Workforce Requirements - Disciplines:</b>
<p><b>Issue 3:</b> Drought and flooding adversely affects individual and community health, safety and natural resources.</p>	<p><b>Strategic Goal #3:</b> Reduce risks from drought and flooding to protect individual and community health and safety.</p>	<p>Minimize drought and flooding within designated number of watersheds.</p>	<p>Assess 1500 dams to determine rehabilitation requirements.</p> <p>Provide technical assistance and information to local, state and tribal governments.</p> <p>7.2 million acres will be treated annually by applying irrigation water management techniques.</p>	<ol style="list-style-type: none"> <li>1. Soil Conservationist</li> <li>2. Civil Engineer</li> <li>3. Conservation Technician</li> <li>4. Soil Scientist</li> <li>5. Civil Eng Technician</li> <li>6. Contract Specialist</li> <li>7. Hydrologist</li> <li>8. Geologist</li> <li>9. GIS Coordinator</li> <li>10. Biologist</li> <li>11. Archaeologist</li> <li>12. Economist</li> <li>13. Outreach Coordinator</li> </ol>

**OVERARCHING MANAGEMENT STRATEGIES**

<b>Workforce Planning Issue:</b>	<b>Strategic Plan Linkage:</b>	<b>Outcome:</b>	<b>Strategies:</b>	<b>Workforce Requirements - Disciplines:</b>
<p><b>Issue 4:</b> Workload will greatly exceed the capacity of the agency and partner workforces.</p>	<p><b>Management Strategy - Issue #1:</b> Maintain an efficient, high-performing, diverse agency workforce, aligned with mission priorities and working cooperatively with our partners and the private sector.</p>	<p>Our human capital plan will reflect the workforce composition required to manage the increase in workload.</p>	<ol style="list-style-type: none"> <li>1. Acquire and maintain our NRCS workforce with the appropriate disciplines and skills.</li> <li>2. Build technical infrastructure to include TSPs, partnerships and other public-private organizations to perform identified work.</li> <li>3. Implement the Agency's CSP.</li> <li>4. Identify core competencies and assess the agency's workforce skills to close the skills gaps. (Skills Database)</li> </ol>	<p>All disciplines</p>

**OVERARCHING MANAGEMENT STRATEGIES**

<b>Workforce Planning Issue:</b>	<b>Strategic Plan Linkage:</b>	<b>Outcome:</b>	<b>Strategies:</b>	<b>Workforce Requirements - Disciplines:</b>
<p><b>Issue 5:</b> Administrative workload of field staff hinders the ability to accomplish mission critical functions.</p>	<p><b>Management Strategy - Issue #2:</b> Make effective use of electronic information management systems to minimize the administrative workload of employees and enable them to provide better service to customers.</p>	<p>Increase efficiency of field staff through improved business processes and information technology.</p>	<ol style="list-style-type: none"> <li>1. Implement the My.NRCS portal.</li> <li>2. Implement field office business process integration system (toolkit, pro-tract, conservation journal, PRMS, electronic contracting, TCAS, etc.).</li> <li>3. Implement the Tech-Pro System.</li> </ol>	<p>All disciplines</p>

**OVERARCHING MANAGEMENT STRATEGIES**

<b>Workforce Planning Issue:</b>	<b>Strategic Plan Linkage:</b>	<b>Outcome:</b>	<b>Strategies:</b>	<b>Workforce Requirements - Disciplines:</b>
<p><b>Issue 6</b> Agency's accountability of resources will be under even closer scrutiny.</p>	<p><b>Management Strategy - Issue #3:</b> Improve accountability and performance reporting processes within the agency.</p>	<p>Agency will exceed accountability standards and have a clear link between budget and performance.</p>	<ol style="list-style-type: none"> <li>1. Develop processes to record obligations and increase accuracy in timelines of financial information.</li> <li>2. Develop methods to show how program outputs affect outcomes.</li> <li>3. Improve accountability process for working with partners, TSPs and others.</li> <li>4. Upgrade existing automated applications for tracking and managing performance and financial records.</li> </ol>	<ol style="list-style-type: none"> <li>1. Management/Program Analysts (Required positions)</li> <li>2. Auditors</li> <li>3. Accountants (Required positions)</li> <li>4. Budget Analysts</li> </ol>

## ***WORKFORCE INFORMATION***

Placeholder—OHCM will provide the data related to the demographics of the NRCS workforce including race, national origin, and gender.

The charts on the following pages represent the workforce profile of NRCS as of Pay-Period 11, 2003. This data was used by a cross-functional planning team within NRCS to draft a comprehensive strategy for bridging the gaps between current and future workforce needs.

**NRCS WORKFORCE PROFILE**

**NRCS WORKFORCE PROFILE  
2003 Data**

**NRCS PFT Profile**

Average Age	45 years
Average Length of Service	19 years
Average Grade	GS-10
Percent Eligible to Retire in Next Five Years	
CSRS	58% of CSRS
FERS	9% of FERS
Total Workforce	31%

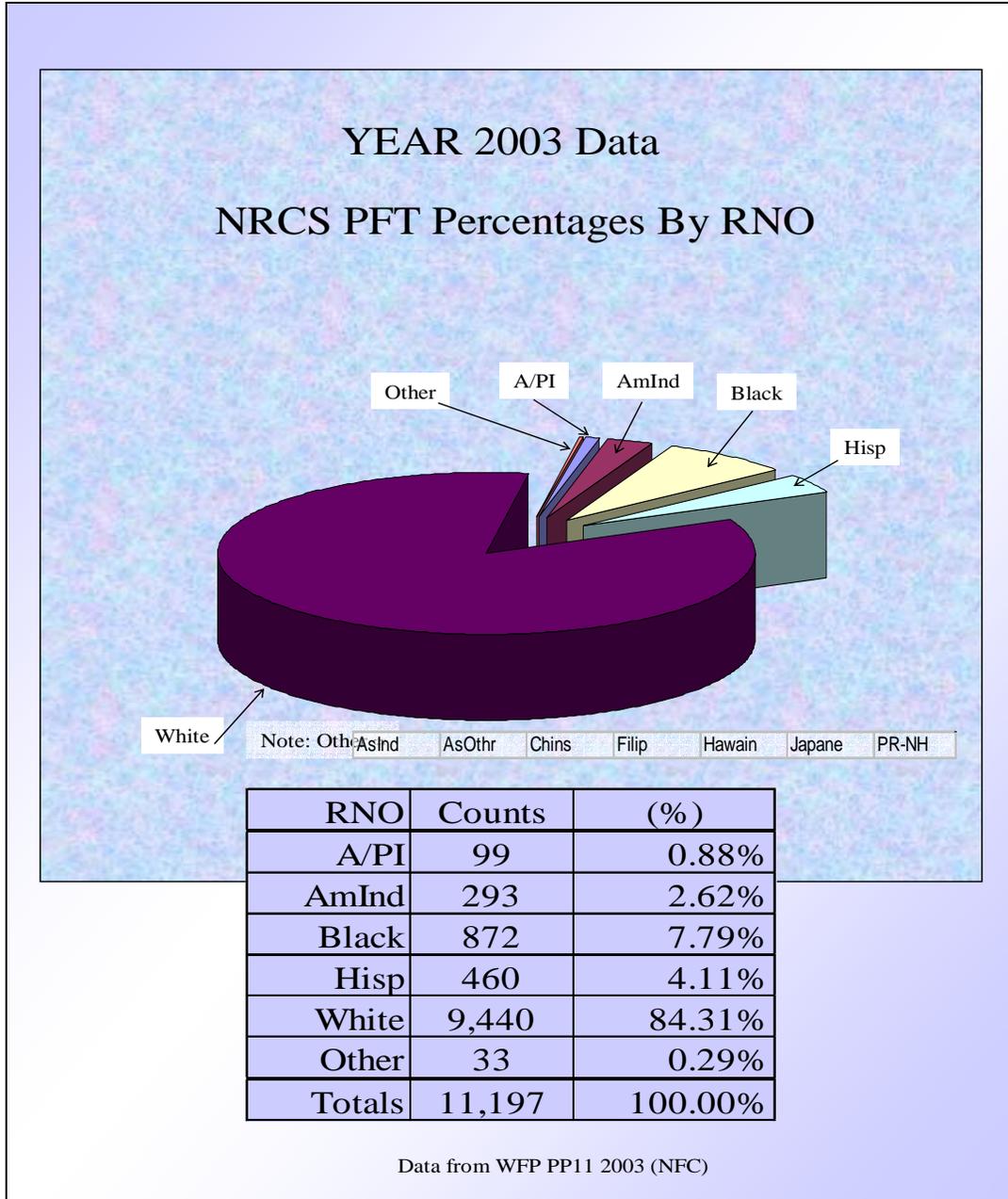
Retirement eligibility was calculated as of 9/30/03

**SENIOR EXECUTIVE SERIES  
SNAPSHOT**

Total Senior Exec Series		26
Percent Eligible to Retire Now (as of 9/30/2003)	42%	11
Percent Eligible to Retire in 5 Years (as of 9/30/2008)	88%	23
Average Age	54	
Average Length of Service	30	
Percent Minority	35%	9
Percent Women	19%	5

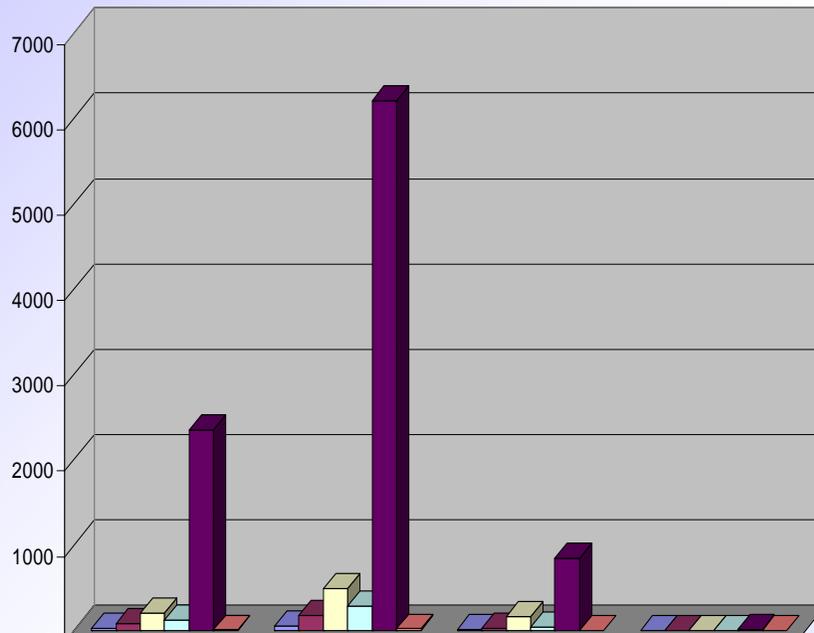
Source: Data from WFP PP11 2003 (NFC)

**WORKFORCE PROFILE BY RNO**



**WORKFORCE PROFILE BY LEVEL, RNO AND GENDER**

## NRCS PFT GRADE LEVELS BY RNO AND GENDER



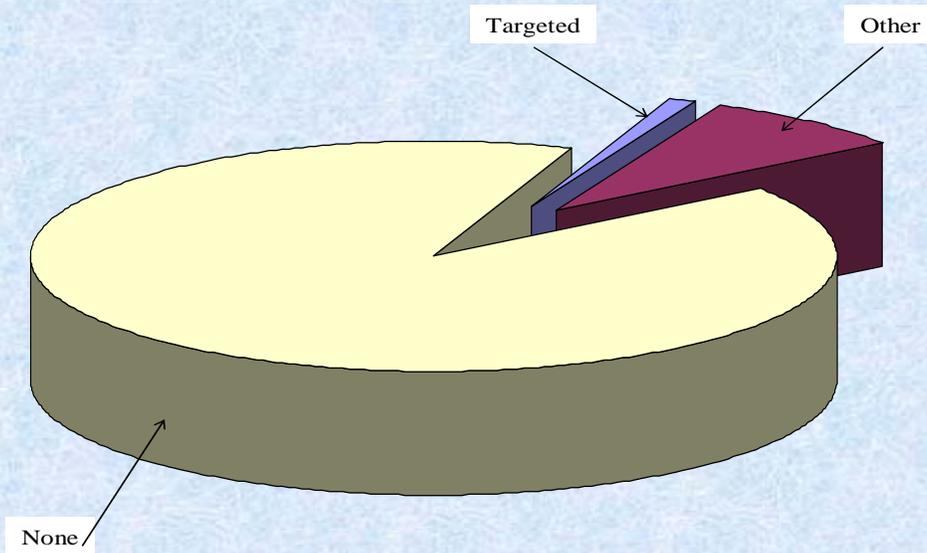
RNO	Entry (1-8)			Mid (9-12)			Senior (13-15)			Senior Exec Service			Totals		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
A/PI	15	11	26	20	38	58	2	13	15	0	0	0	37	62	99
AmInd	25	64	89	47	131	178	4	22	26	0	0	0	76	217	293
Black	116	90	206	159	336	495	60	105	165	0	6	6	335	537	872
Hisp	57	69	126	65	224	289	9	33	42	1	2	3	132	328	460
White	942	1414	2356	1420	4798	6218	176	674	850	4	12	16	2542	6898	9440
Other	5	6	11	6	15	21	0	1	1	0	0	0	11	22	33
<b>Totals</b>	<b>1160</b>	<b>1654</b>	<b>2814</b>	<b>1717</b>	<b>5542</b>	<b>7259</b>	<b>251</b>	<b>848</b>	<b>1099</b>	<b>5</b>	<b>20</b>	<b>25</b>	<b>3133</b>	<b>8064</b>	<b>11197</b>

Note: Bar graph depicts the Grade Level Total column by RNO

Data from WFP PP11 2003 (NFC)

**WORKFORCE PROFILE BY DISABILITY TYPE**

**NRCS PFT WORKFORCE BY DISABILITY TYPE**



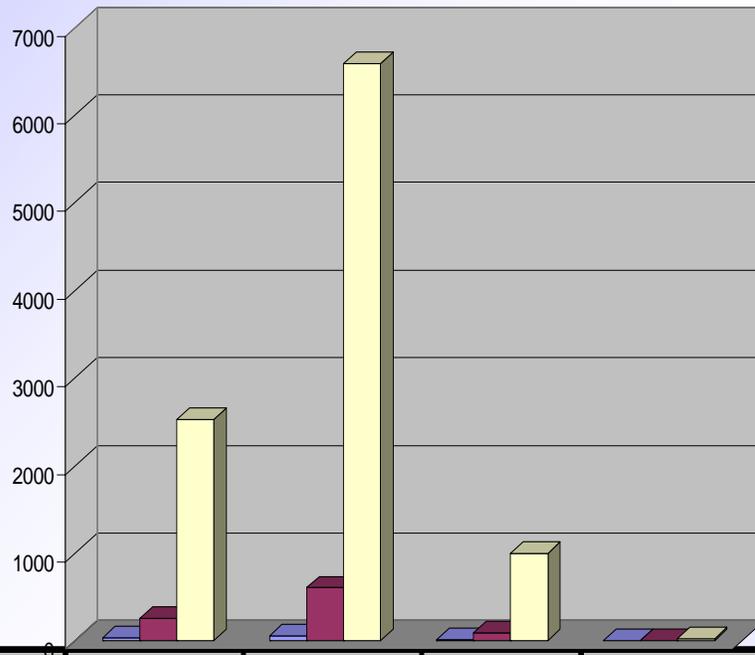
Description	Counts	Percentages
Targeted Disability	111	1%
Other Disability	954	9%
No Disability	10,132	90%
<b>Totals</b>	<b>11,197</b>	<b>100%</b>

Note: Targeted Disabilities are for emphasis in Affirmative Action Program planning.

Data from WFP PP11 2003 (NFC)

**WORKFORCE PROFILE BY LEVEL AND DISABILITY TYPE**

**NRCS PFT WORKFORCE  
BY LEVEL AND DISABILITY TYPE**



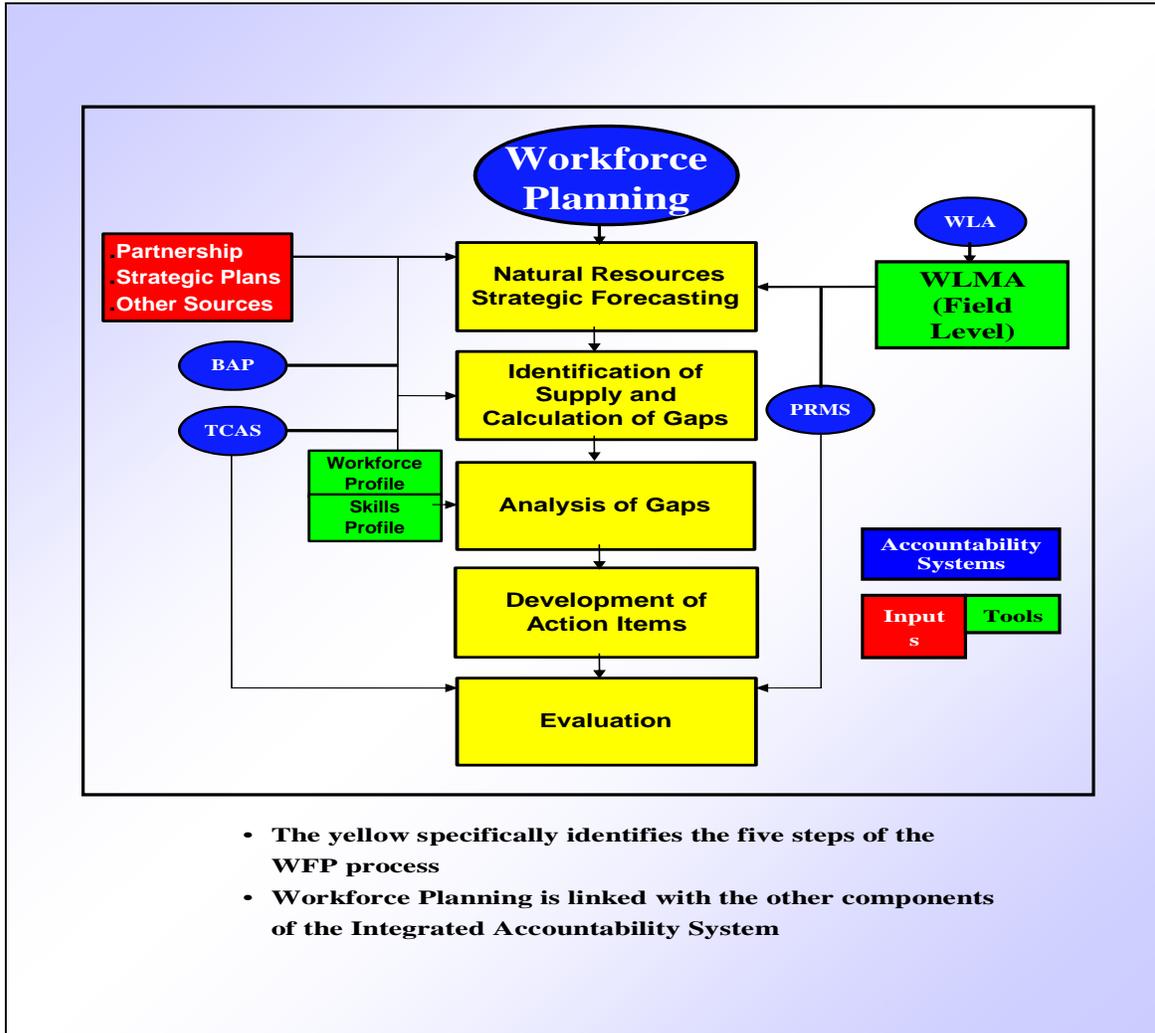
Handicap Description	Entry (1-8)	Mid (9-12)	Senior (13-15)	Senior Exec Service	Total Disabilities
Targeted Disability	37 (33.3%)	62 (55.9%)	12 (10.8%)	0 (0.0%)	111
Other Disability	254 (26.6%)	607 (63.6%)	89 (9.3%)	4 (0.4%)	954
No Disability	2523 (24.9%)	6590 (65.0%)	998 (9.8%)	21 (0.2%)	10132
<b>Total Grade Levels</b>	<b>2814 (25.1%)</b>	<b>7259 (64.8%)</b>	<b>1099 (9.8%)</b>	<b>25 (0.2%)</b>	<b>11197</b>

Note: Percentages are calculated by: Grade Level count / Total Disabilities count

Data from WFP PP11 2003 (NFC)

*CURRENT WORKFORCE INFORMATION—FY005*

*HUMAN CAPITAL PLANNING PROCESS*



**WORKFORCE INFORMATION**

The mission-critical occupations that have been identified for NRCS for the next four years include: General Biological Science (0401), Rangeland Management (0454), Soil Conservation (0457), Soil Conservation Technician (0458), Soil Scientist (0470), Agronomy (0471), Engineering Technician (0802), Civil Engineering (0810), Agricultural Engineering (0890), and Contracting (1102). Among these positions are our traditional recruitment areas of soil conservation, soil science, rangeland management and civil/agricultural engineering. Also represented are emerging occupations such as agronomy and contracting. The following tables identify the number of current employees in each of the mission-critical areas (table 1); the average age of employees in mission-critical positions (table 2); and the number of employees in each mission-critical area who are eligible for voluntary and early retirement (table 3).

**Table 1 Number of employees in mission-critical areas**

Title	Series	Total Number of Employees
General Biological Science	0401	934
Rangeland Management	0454	274
Soil Conservation	0457	4531
Soil Conservation Technician	0458	2001
Soil Science	0470	954
Agronomy	0471	130
Engineering Technician	0802	491
Civil Engineering	0810	580
Agricultural Engineering	0890	259
Contracting	1102	93

**Table 2 Average age of employees in each occupation**

Title	Series	Avg Age	Under Age 31	Age 31-40	Age 41-44	Age 45-49	Age 50-54	Age 55-59	Age 60-64	Age 65-69	Over Age 69
General Biological Science	0401	47	56	139	95	196	259	151	32	5	1
Rangeland Management	0454	39	83	61	17	46	38	21	7	1	0
Soil Conservation	0457	43	737	904	503	229	862	472	116	15	2
Soil Conservation Technician	0458	42	491	335	221	292	306	205	93	35	23
Soil Science	0470	45	147	130	74	185	255	131	29	2	1
Agronomy	0471	49	4	11	17	32	34	24	7	1	0
Engineering Technician	0802	46	48	59	58	109	110	68	28	10	1
Civil Engineering	0810	45	56	125	85	107	99	74	24	9	1
Agricultural Engineering	0890	38	79	79	21	28	21	22	8	1	0
Contracting	1102	44	6	11	13	22	19	19	3	0	0

**Table 3 Number of employees in each mission-critical area who are eligible for voluntary and early retirement—now and by the end of FY 2005**

Title	Series	Eligible for Voluntary Retirement in FY2005	Eligible for Early Retirement in FY2005
General Biological Science	0401	190	468
Rangeland Management	0454	20	60
Soil Conservation	0457	572	1488
Soil Conservation Technician	0458	239	318
Soil Science	0470	183	410
Agronomy	0471	31	53
Engineering Technician	0802	88	186
Civil Engineering	0810	108	203
Agricultural Engineering	0890	24	46
Contracting	1102	14	35

The next three tables (4-6) provide a summary of the Agency's hiring, attrition, and retirement data for each mission-critical occupation for Fiscal Years 2001, 2002 and 2003.

**Table 4 Hiring for mission-critical positions**

Hires				
Title	Series	FY2001	FY2002	FY2003
General Biological Science	0401	21	41	25
Rangeland Management	0454	16	32	19
Soil Conservation	0457	59	247	178
Soil Conservation Technician	0458	314	686	266
Soil Science	0470	35	38	20
Agronomy	0471	3	4	1
Engineering Technician	0802	34	54	21
Civil Engineering	0810	22	40	32
Agricultural Engineering	0890	11	32	21
Contracting	1102	10	5	8

**Table 5 Separations for mission-critical positions for fiscal years 2001-2003**

Separations other than Retirements				
Title	Series	FY2001	FY2002	FY2003
General Biological Science	0401	15	11	12
Rangeland Management	0454	4	7	11
Soil Conservation	0457	59	41	64
Soil Conservation Technician	0458	397	249	337
Soil Science	0470	23	18	23
Agronomy	0471	1	5	4
Engineering Technician	0802	31	14	22
Civil Engineering	0810	12	12	18
Agricultural Engineering	0890	10	6	9
Contracting	1102	1	3	2

**Table 6 Retirements by mission-critical area for fiscal years 2001-2003**

<b>Retirements</b>				
<b>Title</b>	<b>Series</b>	<b>FY2001</b>	<b>FY2002</b>	<b>FY2003</b>
General Biological Science	0401	20	16	37
Rangeland Management	0454	4	2	3
Soil Conservation	0457	81	71	115
Soil Conservation Technician	0458	26	37	23
Soil Science	0470	14	21	21
Agronomy	0471	4	2	5
Engineering Technician	0802	12	10	9
Civil Engineering	0810	12	13	11
Agricultural Engineering	0890	3	3	3
Contracting	1102	1	2	2

# PROJECTED IMPACT OF RETIREMENT ON CORE DISCIPLINES

Table 7 Retirement Impact to core disciplines

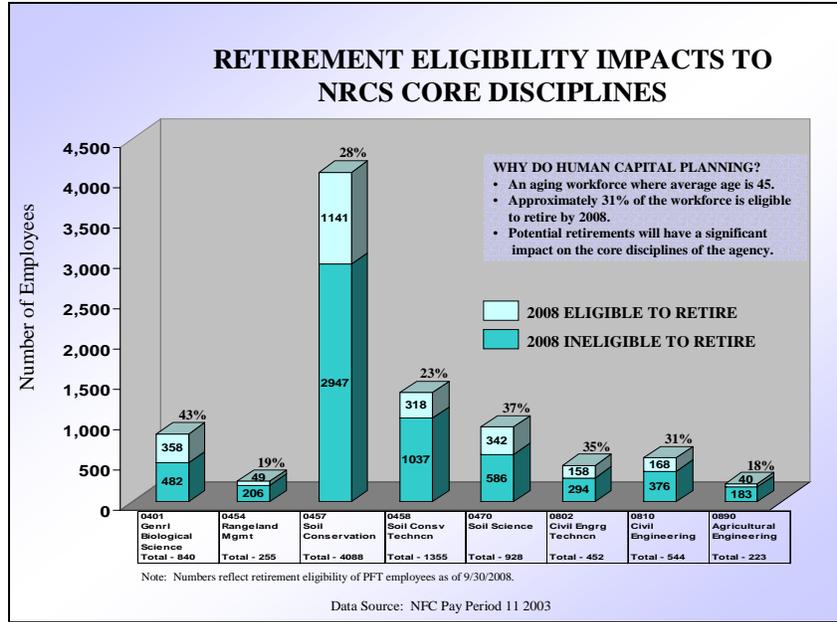
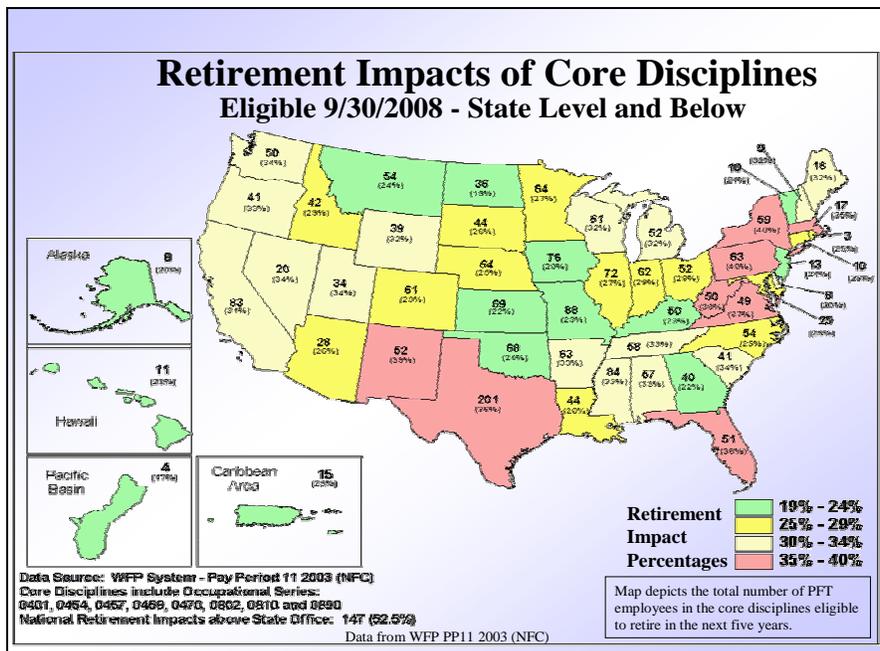


Table 8 Retirement Impact by State



**HUMAN CAPITAL PLANNING & DEPLOYMENT**  
**MISSION CRITICAL DISCIPLINES-- SKILL GAPS**  
**AND STRATEGIES FOR BRIDGING GAPS**

<b>Mission Critical Occupations</b>	<b>2008 Workforce Gaps</b>	<b>Skill Gap</b>	<b>Human Capital Plan Action Items</b>
Soil Conservation (0457)	Needs: 6453 Supply: 2939 Gap: -3514 (54%)	Professional knowledge in conservation of soil, water and related environmental resources.	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives
Soil Conservation Techncn (0458)	Needs: 2451 Supply: 1055 Gap: -1396 (57%)	Practical knowledge of soil, water, and environmental conservation methods and techniques, agricultural operation, and land use measures.	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives
General Biological Science (0401)	Needs: 1082 Supply: 472 Gap: -610 (56%)	Professional work in biology, agriculture, or related natural resource management.	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives
Soil Science (0470)	Needs: 922 Supply: 580 Gap: -342 (37%)	Professional and scientific knowledge in the investigation of soils, their management and adaptation for alternative uses.	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives

**HUMAN CAPITAL PLANNING & DEPLOYMENT**  
**MISSION CRITICAL DISCIPLINES-- SKILL GAPS**  
**AND STRATEGIES FOR BRIDGING GAPS**

<b>Mission Critical Occupations</b>	<b>2008 Workforce Gaps</b>	<b>Skill Gap</b>	<b>Human Capital Plan Action Items</b>
Civil Engineering (0810)	Needs: 703 Supply: 376 Gap: -327 (47%)	Professional knowledge of civil engineering and responsibility for management or performance of planning, designing, constructing, and/or maintaining structures and facilities that provide shelter, support transportation systems, and control natural resources.	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives
Engineering Technician (0802)	Needs: 687 Supply: 293 Gap: -394 (57%)	Practical knowledge of: (1) the methods and techniques of engineering or architecture; and (2) the construction, application, properties, operations, and limitations of engineering systems, processes, structures, machinery, devices, and materials.	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives
Rangeland Mgmt (0454)	Needs: 374 Supply: 210 Gap: -164 (44%)	Professional knowledge in range conservation or range management.	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives

**HUMAN CAPITAL PLANNING & DEPLOYMENT**  
**MISSION CRITICAL DISCIPLINES-- SKILL GAPS**  
**AND STRATEGIES FOR BRIDGING GAPS**

<b>Mission Critical Occupations</b>	<b>2008 Workforce Gaps</b>	<b>Skill Gap</b>	<b>Human Capital Plan Action Items</b>
Agricultural Engineering (0890)	Needs: 311 Supply: 184 Gap: -127 (41%)	Professional application of principles of engineering in combination with knowledge of one or more fields of agriculture.	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives
Miscellaneous Clerk and Assistant (0303)	Needs: 321 Supply: 190 Gap: -131 (41%)	Perform or supervise clerical, assistant, or technician work involved in carrying out the agency's work.	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives
Information Technology (2210)	Needs: 346 Supply: 214 Gap: -132 (38%)	Knowledge of computer requirements and techniques necessary to design, implement, maintain, or modify systems for solving problems or accomplishing work processes by the use of computers, as this is a rapidly changing arena.	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives
Secretary (0318)	Needs: 282 Supply: 206 Gap: -76 (27%)	Knowledge of clerical and administrative procedures and requirements, various office skills, and the ability to apply such skills in a way that increases the effectiveness of others.	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives

**HUMAN CAPITAL PLANNING & DEPLOYMENT**  
**MISSION CRITICAL DISCIPLINES-- SKILL GAPS**  
**AND STRATEGIES FOR BRIDGING GAPS**

<b>Mission Critical Occupations</b>	<b>2008 Workforce Gaps</b>	<b>Skill Gap</b>	<b>Human Capital Plan Action Items</b>
Agronomy (0471)	Needs: 151 Supply: 75 Gap: -76 (50%)	Performance of professional and scientific work in the field of agronomy, including the application of the fundamental principles of the plant, soil and related sciences.	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives
Contracting (1102)	Needs: 95 Supply: 52 Gap: -43 (45%)	Knowledge of the legislation, regulations, and methods used in contracting; and knowledge of business and industry practices, sources of supply, cost factor, and requirements characteristics.	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives

## ***HUMAN CAPITAL PLANNING & DEPLOYMENT***

### ***EMPLOYEE DEVELOPMENT***

The National Employee Development Center (NEDC) is charged with identifying challenges faced by the Agency related to employee development and in partnership with units internal and external to NRCS, deploying strategies to address these challenges. NRCS is committed to maintaining expertise and remaining on the cutting edge of development and delivery of training to ensure that all Agency employees have the opportunity to obtain the highest level of managerial, leadership, and technical skills needed to perform their jobs and to serve the Agency's clientele. The effectiveness of training depends on the delivery method as well as technical content. NRCS will expand on opportunities that provide cost effective, high quality learning experiences to employees and partners of the Agency. The following strategies have been identified to achieve the above outcome.

### **LEADERSHIP/KNOWLEDGE MANAGEMENT**

1. Place emphasis on training programs, such as, Conservation Planning, Nutrient Management, and Operations Management. Include Geographic Information System (GIS) and contracting training for Technical Specialists. Recruit or contract highly trained specialists to provide the training.
2. Develop trainee program for technical specialists in shortage categories.
3. Finalize and implement a multi-level leadership development strategy at all levels of the agency.
  - a. *Capitalize on best practices.*
  - b. *Assess and implement consistency in the leadership development programs agency wide.*
  - c. *Implement the leadership development program for Deputy State Conservationists.*
4. Ensure all the Individual Development Plans (IDP) for all employees include the following training: technical, computer and management.

### **PRIORITIES FOR FY 005**

The following priorities have been identified for 2005:

1. Securing Quality Instructors
2. Developing Quality Training
3. Delivering Quality Training
4. Recognition and Awards
5. Scheduling/Documenting Training

## OBJECTIVES FOR FY 005

1. Be on the cutting edge of design/development of training that supports the strategic goals of the Agency.
  - a. Design/develop Unsteady Flow Analysis
  - b. Design/Develop Introduction to Water Surface Profiles
  - c. Section 508 compliance
  - d. Riparian Management
  - e. Rangeland Soil Quality and Health & Soil Analysis
  - f. Environmental Compliance for Conservation Assistance
  - g. American Indian Workshop
  - h. Institutionalize Training Consultation Process
  - i. Institutionalize IACET-CEU Process for all new and revised classes
  - j. Identify new training initiatives
  - k. Support Reasonable Accommodations Training
  - l. Ensure that the NEDC instructional design process is followed for all classes
2. Deliver a balanced training program that includes satellite, web-based, CD Rom, home study, and traditional classroom training.
  - a. Complete delivery of classes shown on the NEDC web page
  - b. Establish staff responsibilities for multimedia (video, audio, graphics)
  - c. Secure appropriate training for staff with multimedia responsibilities
  - d. Secure software/equipment for multimedia production
3. Institutionalize the NRCS instructor Cadre program by implementing an instructor certification program.
  - a. Determine instructor diversity
  - b. Identify 6 class cadres to implement an instructor certification program
  - c. Establish and institutionalize the NRCS Instructor Certification Program
4. Develop and provide learning opportunities for Technical Service Providers in support of the Agency's farm bill technical responsibilities.
  - a. Increase staffing to provide leadership to TSP training
  - b. Develop TSP training program
  - c. Develop specialized training for Technical Service Providers
5. Develop and institutionalize the proficiency models by integrating them into the Individual Development Plans and the Training Needs Process and documentation.
  - a. Establish Level 3 evaluation process
  - b. Institutionalize IACET-CEU Process for all new and revised classes
  - c. Establish Proficiency Standards for Deputy State Conservationists related to OPM Core Competencies
  - d. Coordinate Executive Leadership Training for Deputy State Conservationists
  - e. Implement Leadership Development Strategy in Agency
  - f. Develop Proficiency Models for 5 selected job titles
  - g. Distribute Proficiency Models to all state training officers

- h. Select 10 additional job titles for inclusion in the Proficiency Model initiative
    - i. Coordinate with NHQ and Department on LMS processes
- 6. Develop and implement a system to recognize Agency personnel doing an outstanding job of employee development.
  - a. Revise the existing NEDC Awards Program
  - b. Implement the new Awards Program

## ***ACCOUNTABILITY***

### **PERFORMANCE MANAGEMENT**

1. Ensure all employees performance standards are linked to the Agency's Strategic Plan.
2. Assess progress of Strategic Human Capital action items.
3. Redesign position management mechanism in I\*CAMS to focus on the FPL of positions to streamline and enhance the process and to ensure data integrity.

**SUCCESSION PLAN  
LEADERSHIP POSITIONS**

<b>Leadership Positions</b>	<b>2008 Workforce Gaps</b>	<b>Leadership Attributes</b>	<b>Human Capital Action Items</b>
Senior Executive Service	Needs: 26 Supply: 3 Gap: 23 88% attrition	Vision External Awareness	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives  * 13 employees currently in the SES Career Development Program
Centers National Headquarters	Needs: 576 Supply: 269 Gap: 307 53% attrition	Creative Thinking Planning and Evaluation Management Controls/Integrity Technology Management	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives
State	Needs: 431 Supply: 197 Gap: -234 54% attrition	Managing a Diverse Workforce Conflict Management Team Building Influencing/Negotiating Financial Management	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives  *8 positions advertised under the Deputy State Conservationist Development Program
Below State Office Level	Needs: 111 Supply: 48 Gap: -63 57% attrition	Communication Problem Solving Interpersonal Skills Decisiveness Human Resources Management Leadership Self-Direction Flexibility Technical Competence	Talent Management - Implement Recruitment Strategy  Leadership/Knowledge - Roll out Employee Development Initiatives

## ***RECRUITMENT STRATEGIES***

### ***RECRUITMENT***

The Natural Resources Conservation Service (NRCS) conducts recruitment efforts throughout the United States and Puerto Rico. As part of our National Recruitment Strategy, we recruit at college and university campuses that possess the agricultural and natural resources majors to enable us to close the skills gaps in our Workforce Plan. Our recruitment efforts also target diverse student populations at job fairs around the country with such organizations as American Indian Science and Engineering Society (AISES), Minorities in Agriculture Natural Resources and Related Sciences (MANRRS), and National Hispanic Environment Council (NHEC).

NRCS recruitment initiatives are both centralized and decentralized. State Offices often recruit at local venues and job fairs. Each year, the Human Resources Management Division issues a calendar of key national recruitment conferences and events of natural resource related organizations. The Division also coordinates and attends at least ten key national recruitment conferences per year.

Through a National Recruitment Team, the Agency has developed and implemented a National Recruitment Strategy. This strategy addresses under representation through targeted education, recruitment and marketing initiatives. The agency is committed to increasing the representation of minorities, females, and people with disabilities at all levels. The NRCS National Special Emphasis Program Managers are integral to this process. By establishing standardized guidelines that State offices use to recruit and retain student hires and through increased outreach to colleges and universities with strong agricultural programs and diverse student populations, NRCS will continue to work to attract qualified applicants to fill the professional, technical and administrative gaps, expected over the next 5 - 10 years, as identified in the Current Workforce Information section of this Human Capital Plan. The following list of schools has been identified for consideration because they have strong support networks for students with disabilities and/or strong agricultural programs and diverse student populations:

- National Technical Institute for the Deaf (RTID), Rochester Institute of Technology (RIT), Rochester, New York,-- excellent computer and educational programs;
- Gallaudet University, Washington, DC,-- excellent computer programming and database management training;
- California State University at North Ridge, North Ridge, California,-- large student services center for students with disabilities;
- University of Wisconsin, River Falls, WI,-- very strong in Agriculture Business, Agriculture Education, Agriculture Engineering and food services.

- University of Wisconsin, Madison -- Good undergraduate program in Agriculture and excellent graduate program. Large minority student population, due in part, to a large out-of-state student body. Strong undergraduate and graduate programs in Agriculture Engineering, Agriculture Journalism, agribusiness, genetics, and life sciences. Significant female student population among both graduates and undergraduates. School also has an excellent campus center for students with disabilities.
- University of Wisconsin at Platteville --Good Agriculture Engineering program. Significant population of African-American students. In all three Wisconsin schools, students start and stay in the agricultural programs. They lose very few students to other majors, because so many of the students originally come from farm backgrounds and are studying Agriculture in order to return to family farms.
- Western Illinois University offers strong Agriculture Business, Agriculture Science and Agriculture Education programs with approximately 300 students a year participating. One third of these students graduate with Agriculture degrees. Only 1% of these graduates are diverse individuals.

NRCS has the goal of hiring 97 individuals with disabilities in 2005 (Under Executive Order 13163). To accomplish this goal, we have provided Regional and State offices with automated databases of college and university students with disabilities and a list of professional contacts in state rehabilitation agencies. We will continue to monitor State Office use of these tools.

The NRCS national recruitment strategy includes increased marketing efforts that will continue to involve the development of recruitment posters and brochures in Spanish and in specialized formats for people with disabilities and will continue to target the broadcast and print media of traditionally underserved communities. NRCS uses a diverse cadre of experienced recruiters. This cadre consists of Human Resources Specialists, Subject Matter Experts and Special Emphasis Program Managers. We have a traveling recruitment display with posters in English and in Spanish and we publish our recruitment and marketing materials in English and Spanish, as well as in alternative formats for people with visual and cognitive disabilities. Our recruitment and marketing materials all reflect NRCS's family-friendly workplace, by describing flexible hiring procedures and benefits to Federal employment. Our marketing materials feature diverse individuals, engaged in all aspects of Agency work.. We also have a Recruiter's Toolkit, which our recruitment cadre is trained to use and a recruitment videotape which features diverse NRCS employees.

NRCS will also continue to provide mentoring guidance for state offices to use in establishing mentoring programs and use recruitment incentives to attract qualified diverse applicants to hard-to-fill positions in the Agency. These incentives include the use of:

- Recruitment/relocation bonuses
- Retention allowances
- Student loan repayment and
- Superior qualifications appointments

### ***TALENT MANAGEMENT***

1. Implement multi-faceted recruitment plan including outreach to elementary, high school, college, universities, and private sector, i.e. HACU, 1890 City Colleges, Historically Black Colleges, American Indian Schools/Tribal Colleges, retirees, etc.
  - a. *Disseminate NRCS recruitment marketing materials to reflect the family friendly work environment.*
  - b. *Partner with colleges/universities to ensure their curriculums meet or address qualification requirements for employment within NRCS.*
  - c. *Engage partners, organizations, underserved communities, Indian Nations and community based organizations in the recruitment process.*
  - d. *Identify and distribute information on employment pool where potential qualified employees can be obtained.*
  - e. *Update and recruit for the disciplines as reflected in the workforce plan.*
  - f. *Incorporate family-friendly programs into the marketing strategy.*
  - g. *Assess the effectiveness of the liaison positions performing recruitment functions and make recommendations for improvement.*
2. Communicate and disseminate information on new employment authorities that will facilitate recruitment activities.
3. Market and increase the use of the recruitment incentive package.
4. Review employment activities to assess progress towards addressing under-representation of identified groups on a bi-annual basis and take appropriate action.
  - a. *Assess retention of identified groups and make recommendations based on results.*
  - b. *Provide leadership periodic updates reflecting workforce composition.*
  - c. *Re-establish an exit interview process.*

## ***RECRUITMENT METHODS /SOURCES***

Internal – Merit promotion, reassignments, conversion actions and Career Enhancement Programs will continue to be the main internal methods of providing opportunities for career placement and enhancement.

External - We will continue in fiscal year 2005 to attend and be visible at career days, job fairs, special emphasis conferences, and professional society meetings. Many of these functions will be attended by National Headquarters special emphasis program managers and representatives from the Regional, State and field levels. A diverse National Recruiter Cadre will attend at least eight job fairs around the country. These fairs will target mission-specific disciplines that address the skills gaps identified in the Current Workforce Information section of the Agency's Strategic Human Capital Plan. Fairs that the recruiter cadre will attend include:

- American Indian Science and Engineering Society (AISES)
- American Council of the Blind (ACB)
- Federally Employed Women (FEW)
- Minorities In Agriculture, Natural Resources and Related Sciences (MANRRS)
- National Hispanic Engineering and Environmental Conference (NHEEC)
- Office of Personnel Management (OPM) Career Fair
- Society for Range Management (SRM)

We will advertise jobs using “all-sources” and with national organizations and magazines that target the populations from which we must recruit in order to fill mission-specific positions. These include the organizations listed above, as *College Placement Council* and *Careers and the Disabled*.

As a means of attracting and recruiting minorities, women, and people with disabilities from under-represented groups into the agency, we will also continue to make use of internship and student programs such as:

- the USDA Career Intern Program
- the Presidential Management Fellows Program
- the Agricultural Intern Program
- the Administrative and Information Technology Trainee Program
- the USDA 1890 National Scholars Program
- HACU In-Residence Program
- Student Educational Employment Program (Student Career Experience Program Student Temporary Employment Program) and
- the Workforce Recruitment Program for College Students with Disabilities

The following list of recruitment opportunities have been identified for fiscal year 2005:

- October 10-15** National Congress of American Indians  
61<sup>th</sup> Annual Session  
Location: Greater Ft. Lauderdale Convention Center  
Ft. Lauderdale, FL  
<http://www.ncai.org>
- October 16-19** Hispanic Association of Colleges and Universities (HACU)  
18<sup>th</sup> Annual Conference  
Theme: "Championing Hispanic Higher Education Success:  
Investing in 21st Century America"  
Location: Intercontinental Hotel Miami, FL  
<http://www.hacu.net>
- November 2 – 7** The Society of Mexican American Engineers and Scientists  
(MAES)  
30<sup>th</sup> MAES International Symposium and Career Fair  
Location: Austin Marriott at the Capitol and Austin  
Convention Center  
Austin, TX  
Contact: **Rafaela Schwan, (817) 423-4332**  
<http://www.maes-natl.org/symposium>
- December 8-10** Perspectives of Employment Of Persons with Disabilities  
Conference  
Location: Bethesda Hyatt, Bethesda, MD  
One day Disability Emphasis Program Manager training will occur  
December 6, in conjunction with Perspectives  
Contact: **Cliff Denshire, (775) 273-2134**
- December 6** Annual Meeting, The Organization of Professional Black NRCS  
Employees (Black Emphasis Program Manager Training to be held  
in conjunction with NOPBNRCSE meeting)  
Location: Sacramento, California  
Contact: **Thaddeus Hamilton, (954) 792-1984**  
<http://www.nrcs.usda.gov/intranet/organ>
- January 7-11** Society of Hispanic Professional Engineers (SHPE)  
National Technical & Career Conference (NTCC)  
NTCC provides educational, technical and employment  
opportunities for professional and student engineers.  
Location: Chicago Marriott Downtown  
Chicago, IL  
<http://www.shpe.org>

**February 6**

International Society for Range Management  
58th Annual Conference

Location: Fort Worth Convention Center, Fort Worth, Texas

Contact: **Ann Harris, [amharris@rangelands.org](mailto:amharris@rangelands.org)**

**<http://www.rangelands.org>**

### ***STUDENT RECRUITMENT***

Student hiring will continue in FY 2005 and the Human Resources Management Division will monitor progress through quarterly reports generated from the National Finance Center database. This hiring initiative will be a major step in filling positions for the future as well as overcoming some of the under representation of women, minority groups, and people with disabilities in the workforce. It is anticipated that approximately 500 students will be hired in NRCS during fiscal year 2005.

### ***HIRING FLEXIBILITIES***

As part of the President's Management Agenda, the Agency is implementing human capital initiatives, which are intended to streamline and simplify the hiring process. The Natural Resources Conservation Service, Human Resources Division (HRD), is striving to improve human resource (HR) services to customers. To accomplish this, modern Human Resource operating systems are a business necessity. Automating human resource functions will allow for efficient processes and improved customer service. We plan to implement hiring flexibilities through the use of "Quick Hire", category-based rating and selection and direct hire authority. We will also continue to monitor NRCS State Office compliance with the 45-day hiring model.

We plan to renew a one-year subscription to Quick Hire, an automated staffing solution. The one-year subscription will provide us the opportunity to continue using and deploying the best technological solution available to streamline the Federal hiring process. Quick Hire is a web-based staffing system that allows applicants to apply for Government positions electronically. The system is capable of creating on-line vacancy announcements; posting vacancy announcements to various web sites automatically (Office of Personnel Management [OPM] USAJOBS, State and local governments, diversity organization, etc); rate and rank applications; generate certificates of best eligible applicants; produce workload reports; statistical summaries; Equal Employment Opportunity reports; and AdHoc reporting from the database. It also will fully integrate with OPM's Recruitment One-Stop E-Gov initiative.

NRCS is piloting Quick Hire in several of our State offices. We believe that this on-line vacancy tool will be of value to us in filling our mission-critical positions. We advertise our positions "all sources" on USAJOBS and we rely heavily on recruitment at least ten job fairs annually, to increase diversity in our Agency. On-campus interviews are frequently conducted by our State Human Resources Specialists. Student and career intern positions are often advertised in newspapers and magazines that target university students and young professionals. We include non-traditional (Hispanic and other minority) media in the distribution of our job information.