
2000 Forest Service Engineers of the Year

From the list of excellent candidates, the winners of the 2000 Engineer of the Year awards were selected. Congratulations to the following winners:

- Managerial Engineer—Gary Garthwait from the Regional Office in Region 1.
- Technical Engineer—Shannon J. Clark from the Coconino and Kaibab National Forests in Region 3.
- Engineering Technician—Elizabeth M. King from the Regional Office in Region 4.

In recognition of their achievements, Forest Service Associate Chief for Natural Resources Hilda Diaz-Soltero and Director of Engineering Vaughn Stokes presented each winner with a special plaque and cash award at a ceremony in Washington, DC, on April 2, 2001. Members of the executive leadership team and the winners' families also attended the ceremony. A summary of the winners' accomplishments is included on the following pages.

Congratulations to those individuals who were selected to represent their region as candidates for the 2000 Forest Service Engineers of the Year. The finalists in all categories include the following:

Managerial

Candace Bogart, *Region 3*
Dan Magallanez, *Region 6*
Hal Peterson, *Region 4*
Greg L. Watkins, *Region 5*

Technical

Jeffrey Alexander, *Region 4*
William H. Clerke, *Region 8*
Nancy Tipton Lee, *Region 5*
Daniel C. Smiley, *Region 1*
Warren F. Sutton,
*San Dimas Technology and
Development Center*
Kenneth Vaughan, *Region 10*
Donna Wians, *Region 6*
Bob Yoder, *Region 6*

Engineering Technician

Danny Hughes Call, *Region 8*
Steve Esquibel, *Region 1*
Wayne Hamilton, *Region 6*
Ken Pence, *Region 5*
Ronald F. Tissaw, *Region 3*



2000 Forest Service Engineers of the Year. Left-right: Gary Garthwait, Elizabeth (Beth) M. King, Vaughn Stokes, Director of Engineering, and Shannon J. Clark

Gary Garthwait

Managerial Engineer of the Year



Gary Garthwait is a facilities and environmental engineer in Region 1's Missoula, MT, office. He excels at managing recreation and wilderness activities at the forest level, at coordinating trails work at the regional level, and most recently, in developing a fire facilities regional action plan with fire, recreation, and engineering managers. During the past 2 years, he has managed a complex and growing facilities program along with a three-person environmental engineering staff and a three-person historic preservation team.

Through Gary's leadership, the Lolo National Forest pioneered in the historic preservation of buildings, establishing a regional preservation program that is still active. He also coordinated the first facility design charrette in Region 1. He worked closely with regional and forest heritage staff people to reach an agreement on a 2-year preservation program, the first year in the program's 7-year history in which this level of out-year planning has been achieved.

Gary's quest for better, more creative, cost-effective engineering services extends beyond Forest Service boundaries through interagency agreements with the following:

- The U.S. Army Corps of Engineers on facility design and construction projects of more than \$11 million in the Northern Region, including Web-based design review, real-time cost accounting, job order contracting, and Indefinite Delivery Indefinite Quantity (IDIQ) construction contracting for new facilities;
- The U.S. National Park Service (NPS) on supplementing the Northern Region's Historic Preservation Program through mutual cooperation on projects and opportunities for access to new technology and the best training available; and through promotion of Contracting services that employ the latest technologies and methods for architectural and engineering needs and services that enhance the Forest Service's communication capabilities for effective technology transfer.

Gary advocates integrating engineering with all resource management areas. His comprehension of engineering's critical role in the complex, dynamic nature of fire management persuaded the regional fire staff to develop a 2-year program for facilities that could exceed \$20 million. His ability to meld engineering skills with recreation management has furthered cooperation in both disciplines.

Gary's leadership abilities are apparent in his innovative use of contractors, interagency agreements, and out-of-region employees to implement Region 1 facilities projects, obligate funds, and provide adequate time for completion despite peak demand (an average of more than \$6 million annually for construction) without increasing staff. He has inspired teamwork among forest facilities engineers and forest recreation staff people. As a facilitator for the Region 1 Changing Roles in the Workplace course, Gary led affirmative action efforts.

Eight weeks after becoming aware of a substantial increase in facility funding, Gary developed a specific project implementation plan, facilitated a 2-day forest facility meeting to agree on a plan, and engaged the U.S. Army Corps of Engineers to design and construct six new projects. He prepared job descriptions and facilitated advertising for a new fire specialist project team.

In 1999, Gary developed a plan to train the recreation staff to use recreation-meaningful measures on all ranger districts in the Northern Region by assembling a cadre of forest-level trainers, preparing a training plan, and leading a 10-week training effort. In the same year, Gary worked with Region 1 forest personnel, the Bureau of Land Management (BLM), Yellowstone and Glacier National Parks, and the Continental Divide Trail Alliance to prepare a 10-year action plan for completing the Continental Divide National Scenic Trail in the Northern Region. He assembled a list of projects and associated budgets and designed and facilitated a training session in Missoula for all participants to forge agreement on this plan.

Gary also assembled a team of forest supervisors, forest engineers, and regional engineering staff to develop a regional facility management strategy and a multiyear construction list. In 2000, this group succeeded in preparing a 5-year program that includes project design prospectus preparation for all projects, 2 years before construction. This effort has achieved great program stability and generated Forest Supervisor involvement and trust.

Gary serves his community as a volunteer. He led university students in studying agricultural practices and land terracing in the mountainous regions of Nepal; supported Habitat for Humanity in Missoula by directing high school student volunteers in a house-building project in Mexico; led outdoor youth activities such as trips on the Missouri River, backcountry hiking, weekend ski retreats, summer work camps in inner city and migrant work settings; and trained as a facilitator for support groups within the public school system to target substance abuse and offer confidential counseling.

Gary has had a positive influence on the professional growth of subordinates and peers in Forest Service resource management programs. He looks for ways to motivate his employees and encourages ownership of their programs. As a registered professional engineer in Wisconsin, Alaska, New Mexico, and Montana, Gary sends a clear message to his employees to seek professional registration. Currently, four of his six professional employees are registered professionals.

Gary and his staff conduct an average of five classes per year for the Northern Region Training Academy, a key portion of the Region 1 training program. A new class debuts in 2001 for line officers on "Historic Preservation of Facilities for Managers," and a multiple-day facility engineering orientation session for new Region 1 forest facilities engineers is in the works.

Gary Garthwait has consistently exhibited professional and managerial leadership in his career and in his personal commitments locally, nationally, and abroad.

Shannon J. Clark

Technical Engineer of the Year



Shannon J. Clark is a facilities engineer for the Region 3 Coconino and Kaibab National Forests in Arizona. He has been recognized repeatedly over his 24-year career for contributions ranging from effective management of the facilities engineering section of the Coconino and Kaibab National Forests, service in fighting wildfires, outstanding effort in project completion for INFRA and recreation capital investment, and professional assistance on a variety of projects. Recognition comes not only from the engineering section, but also from forest supervisors, administrative officers, district rangers, the regional office, recreation staff officers, and the Rocky Mountain Research Station.

Shannon is a leader in embracing new technology. He worked with the Arizona Department of Environmental Quality and Northern Arizona University to install an experimental wastewater system adapted to the harsh native environmental conditions; pioneered the use of the “turnkey” construction contract for the Peaks Ranger Station in the mid-1980s; and selected and installed a state-of-the-art, automated well at the Palatki Cultural Site. Shannon excels at technology transfer, often networking with his peers on other forests and regional staffs. He frequently provides solutions to engineering problems by integrating multiresource perspectives, such as contributing technical expertise to the renovation of a historic structure on the General Crook Trail and to concept planning for a wildlife project to transport reclaimed water from a city treatment plant to create a riparian haven for wildlife.

Shannon has exhibited leadership qualities in championing the shared services for the engineering staff of the Coconino and Kaibab National Forests. By earning the respect of both staffs, he has helped make the shared services concept a reality. Despite his heavy workload, Shannon has taken the time to mentor an engineering trainee to become an excellent employee.

Shannon’s leadership qualities and organizational capabilities were a major asset in developing and implementing a formal work program for the Coconino NF, which continues to be used today. His assessment of realistic expectations for accomplishments has helped the engineering staff accomplish nearly all of their goals, with record numbers of contracts awarded and strengthened customer relations.

Shannon actively supports recycling efforts, fire suppression activities, and workforce diversity efforts. He has hired or recommended an Asian co-op, a Native American trainee, and a Hispanic team leader.

Shannon also has been instrumental in developing and implementing the Coconino’s tool for tracking progress and accomplishments for the recreation capital investment program, “Cocogate.” When the engineering services of the Coconino and Kaibab NFs were combined, Shannon developed and implemented an equally successful parallel process for the Kaibab National Forest.

During the merging of the engineering sections of the two forests, Shannon absorbed more and more professional responsibilities, yet he maintained his positive attitude and excelled in producing substantial quality work on both forests with the following:

- Overseeing the design of major recreation projects and of the facilities program deferred maintenance for water/wastewater, buildings, and dams, and support to recreation and mineral management, plus real property inventory for the Coconino National Forest.
- Providing technical input for a dam removal project, land exchanges, recreation concession operations, and special use operations.
- COR responsibility for leases, and Request for Proposal (RFP) preparation on several offices, and preparation of out-year project proposals for Fire, Administrative, and other (FA&O) projects.
- Managing the design and construction of several building projects.

Shannon is equally supportive in his community. He volunteered his engineering expertise to help design the installation of a figure skating jump harness and has served as music coordinator at the rink for figure skating shows for the past 10 years. As a parent coordinator for a Flagstaff High School bank fundraiser, Shannon shared his cooking and organizational skills in preparing 500 dozen enchiladas and created instructions so that others could replicate his success. He lent his talent to refurbishing the playroom of the Flagstaff Medical Center Children's Rehabilitation Center that was adopted by the Forest Service and to reviewing plans for remodeling a building for his church. In addition, he furthers conservation education by participating in the Girl Scouts' Outdoor Odyssey Program.

Shannon hones his professional skills by attending local American Society of Civil Engineers (ASCE) meetings, professional conferences, and management training. He sometimes contributes to presentations of Forest Service projects and hosted the designation of the Kaibab National Forest steel dam as a historic engineering structure. He is a member of the Arizona Water and Pollution Control Association. He continues his professional education by attending courses or workshops on such diverse issues as Federal safety and health, building and electrical codes and system design and inspection, facilities operation maintenance, dams inspection maintenance, reinforced masonry design, hazardous materials first responder awareness, lead exposure in construction, and wastewater management.

Shannon J. Clark has demonstrated leadership in embracing, implementing, and sharing technical engineering skills in the workplace and in the community.

Elizabeth M. King

Engineering Technician of the Year



Elizabeth M. King is a Region 4 technical information specialist in Ogden, UT, with 17 Certificates of Merit/Special Act Awards and 34 peer awards. In August 1999, however, Beth drafted her 12-step program on career rejuvenation, which was to become “Confessions of a Retiree Wannabee,” inspiring and motivating employees at all levels of the organization to fine-tune their work skills and attitudes and improve their performance.

Beth’s primary responsibilities benefit from her skills in assisting regional personnel in historical research, accessibility information, vegetation typing, and other specialized projects through maintaining a high-quality library of mapping and photography products. She stores and maintains mapping layers and associated databases, negatives for maps and publications printed in the region, digital files for orthophoto maps and other products, and satellite imagery.

Beth continues to take on new challenges such as the following:

- Providing map reading training to rock collecting chapters and sharing information with more than 350 school children and adults on geographic information system (GIS) activities and historical maps at the Intermountain Region’s GIS display in November 2000.
- Volunteering to assume map sales and collection officer duties for the regional office; to pursue R.S. 2477 road research on Idaho projects from county files, local museums, districts, and forests for the engineering and lands staffs for several months; to assume maintenance duties and responsibility for the Region 4 history archives of more than 8,000 historical photos located at Weber State University, streamlining and augmenting the collection with new engineering historical files, and maintaining and updating multiple databases.
- Researching historical map and aerial photo files of specific interest to the Intermountain Region at the National Archives and Library of Congress.
- Handling the logistics of a ponderosa pinecone harvest on a 3-week detail to the Idaho City Ranger District, the most successful ever, and was invited to return for spring planting.
- Coordinating the Great Western Trails booklet assembly and a fire award assembly project, using volunteers and students, saving much time and money for the Forest Service.
- Assuming responsibility for the current slides collection and regional photographs. Contracted to capture more than 4,000 slides as high-resolution, digital images on more than 70 CD-ROMs. She will coordinate distribution of an additional black and white photo CD collection throughout the region.

- Organizing and cowriting an Oracle database for the current and historical photo projects for future intranet accessibility.

Beth's foray into the motivational arena with her Retiree Wannabee concept has mushroomed beyond the regional office to include forests within the region and other regions. She presented her program 14 times between August 1999 and November 2000, touching the lives of approximately 2,000 Forest Service employees. She has established a Web site to further her message within the Agency and holds monthly "brown bag" rejuvenation career support groups.

The program is threefold: Value the Past, Deal with the Present, and Prepare for a Successfully Refocused (rather than a retired) Future. On her own time, she developed a series of interesting and informative topics for the support groups with guest speakers from the Service Corps of Retired Executives (SCORE) and the Social Security Administration and a retiree panel for sharing tips and helps for successful retirement strategies.

For the Value the Past portion of the program, Beth set up a liaison to provide mentoring opportunities between employees and retirees. She established an exhibit to display past and current efforts of engineering employees, initially focusing on ski lift safety and avalanche control work, and prepared another exhibit on fire management and the story behind Smokey Bear. She has pledged to change the exhibits two to three times each year and hopes to involve as many retirees as possible.

Because Beth's personal rejuvenation goals closely match the "New Century of Service" national program, which will pave the way for the 100th Anniversary of the Forest Service in 2005, she is now a member of the regional team. She gave the keynote address at the January 2001 national committee kickoff meeting.

Despite her myriad responsibilities, Beth has found time to support firefighting for the past 13 years as a buying team member. She helped write Region 4's manual of standard operating procedures. She has trained new buying team members for several seasons and was instrumental in formatting the waybill that is now used by all local and national buying teams.

Beth strongly supports multicultural awareness and equity for all employees through participation as a committee member for events such as Black History Month. She scripted a puppet show highlighting Kwanza, directed the production, used fellow committee members' voices on the companion audiotape, and taught members to work the puppets.

Beth maintains a high level of commitment in community service. She volunteered as a board member of the Alliance Federal Credit Union, a financial institution for Forest Service and Postal Service employees, from 1989 until 2000. She also has made and donated many quilts, including 18 for the Head Start Community Project in Ogden. She has been an active member of the Forest Service Women's Association for 21 years, providing technical expertise and signing advice for hearing-impaired individuals for various group activities, helping to raise thousands of dollars for various community groups.

Beth has written and produced numerous puppet shows for the community, including Christmas shows at three Davis County libraries and several Davis

Behavior Health's preschool programs to help disadvantaged children deal with bullying and substance abuse. Beth also wrote and produced a benefit Christmas puppet show where she used Forest Service Women's Association members as voices and puppeteers for Ogden's School for the Blind and Deaf Children.

Elizabeth M. King continues to inspire and motivate Forest Service employees with her career rejuvenation program while refining her expertise as a technical information specialist and finding new ways to serve on local, regional, and national fronts.