

STATEMENT OF KEVIN N. MORRIS, PRESIDENT, NATIONAL TURFGRASS FEDERATION, INC., IN SUPPORT OF FY 2008 RESTORATION OF FUNDING FOR THE FULL-TIME TURFGRASS RESEARCH SCIENTIST IN THE BUDGET FOR THE AGRICULTURAL RESEARCH SERVICE (ARS) & A REQUEST FOR FUNDING SUPPORT FOR THE NATIONAL TURFGRASS RESEARCH INITIATIVE PRESENTED TO THE SENATE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES; MARCH 15, 2007

Mr. Chairman and Members of the Subcommittee:

On behalf of the National Turfgrass Federation (NTF), I appreciate the opportunity to present to you the turfgrass industry's need and justification for continuation of the \$490,000 appropriated in the fiscal year 2007 budget for turfgrass research within the Agricultural Research Service (ARS) at Beltsville, MD. Secondly, we ask that the committee support the \$1,880,000 request for Drought Mitigation, either by supporting the President's budget request (we are unsure at this time if this funding was included in FY08) or via a Congressional earmark. This funding will be used by ARS to conduct turfgrass water conservation and salinity research at Phoenix, AZ and Riverside, CA. Thirdly, we ask for your support of \$450,000 in separate continuing funding for ongoing research programs in Beaver, WV, and \$450,000 for Logan, UT. Finally, we request water quality research scientists at ARS stations in University Park, PA, (\$450,000) and Madison, WI (\$450,000). All funding provided by the Committee is requested to go directly to USDA-ARS, not the industry per se.

1) Restoration of funding for the existing ARS Scientist Position and related support activities at Beltsville, MD (\$490,000)

NTF and the turfgrass industry are requesting the Subcommittee's support for \$490,000 to continue funding for the full-time scientist staff position within the USDA, ARS at Beltsville, MD, focusing on turfgrass research, that was provided by the Committee in the fiscal year 2007 budget, and in the five previous budget cycles. We consider this funding our Congressional 'baseline', i.e. that funding which is central to and critical for the mission of the National Turfgrass Research Initiative. We are very grateful for this support and hope the Committee will continue this funding.

Turfgrass is a 50,000,000 acre, \$40 billion per year industry in the U.S., that is growing exponentially each year. Turfgrass provides multiple benefits to society including child safety on athletic fields, environmental protection of groundwater, reduction of silt and other contaminants in runoff, and green space in home lawns, parks and golf courses. Therefore, by cooperating with NTF, USDA has a unique opportunity to take positive action in support of the turfgrass industry. While the vast majority of the USDA's funds have been and will continue to be directed toward traditional "food and fiber" segments of U.S. agriculture, it is important to note that turfgrasses (e.g., sod production) are defined as agriculture in the Farm Bill and by many other departments and agencies. It should also be noted that the turfgrass industry is the fastest growing segment of U.S. agriculture, while it receives essentially no federal support. There are no subsidy programs for turfgrass, nor are any desired.

For the past seventy years, the USDA's support for the turfgrass industry has been modest at best. The turfgrass industry's rapid growth, importance to our urban environments, and impact on our daily lives warrant more commitment and support from USDA.

A new turfgrass research scientist position within USDA/ARS was created by Congress in the FY2001 budget. Additional funding was added in FY2002 with the total at \$490,000. A research scientist was hired, and is now working at the ARS, Beltsville, MD center. A research plan was developed and approved by ARS. This scientist has used the funding for a full-time technician, equipment and supplies to initiate the research plan and for collaborative research with universities. We have an excellent scientist in place, and he is making good progress in establishing a solid program. At this point, losing the funding for the position would be devastating to the turf industry, as significant research has begun.

2) Support the President's budget request for Drought Mitigation/request a Congressional earmark (\$1,880,000)

The turfgrass industry is excited that for the *first* time, the President's FY07 budget contained funding for turfgrass research within ARS. Because the FY07 was not passed before the President submitted his FY08 request, we are unsure if this funding in the FY08 President's budget. Therefore, if included in the FY08 President's budget, we request support of this important drought mitigation research. If not included in the President's FY08 budget, we request that this funding be supported and included by Congress as new projects. This funding will be used to hire scientists in two very important locations, Riverside, CA and Maricopa, AZ, focusing on water conservation, wastewater reuse and salinity research. These issues are the most critical research needs for the survival of the turf industry. Following is a brief description of the research that ARS will conduct with this funding:

ARS will:

Develop Technology and Management Systems to Use Non-Potable Water to Reduce Agriculture's Vulnerability to Drought (\$1,880,000 total). In the process, ARS will develop systems to safely reuse wastewater and low-quality water as a means of irrigating agricultural, horticultural and turf-based enterprises in an environmentally and economically sustainable manner.

As noted in USDA's Explanatory Notes accompanying the FY07 budget request, this funding will be directed to the following two critical locations:

Maricopa, AZ, (\$940,000) - The U.S. Water Conservation Lab in Maricopa will determine the on-site impacts and movement in the air, soil, plant, and ground water of biological and chemical substances contained in treated and untreated waste water used for irrigation of turfgrass. They will also develop irrigation technologies and management systems to mitigate the impact of elevated levels of these compounds and nutrients when wastewater is used in the production of turf and specialty crops.

Riverside, CA, (\$940,000) - This research will be conducted at the world-renowned U.S. Salinity Lab. The Riverside lab will focus on the development of new irrigation technologies and systems to either mitigate or manage the effect of saline irrigation on the production of turf and specialty crops.

3) Request funding of ongoing programs and two ARS scientist positions at two ARS installations @ \$450,000 each (Total: \$900,000)

The turfgrass industry also requests that the Subcommittee appropriate an additional \$900,000 for funding first allocated in FY05, and continued in FY06 and FY07 bills. As a part of the National Turfgrass Research Initiative, the research conducted at Logan, UT and Beaver, WV is vital to the turf industry. We are asking for \$450,000 at each location. Following is a brief description of the research that ARS will conduct with this funding:

Beaver, WV, (\$450,000) - The lab at Beaver has significant expertise in soils and by-products research. They have excellent staff and facilities already in place. For the turfgrass industry, they are working on improving soil conditions and management systems to make athletic fields softer and with improved turf cover, thereby increasing safety. They also are considering the use of local by-products to develop improved soil systems for parks, lawns, athletic fields and golf courses. Besides being vital to the turf industry, this research is very important to the regional economy and many industrial concerns.

Logan, UT, (\$450,000) - Logan, UT is an ideal location for research on drought tolerant grasses and how they function. The Logan lab is world renowned for its efforts in collecting and improving grasses and other native plants for forage and range purposes. With the funding that was initiated in FY05, they have directed additional efforts research on breeding and genetics of turfgrass, with emphasis on identifying plant material with superior drought and salt tolerance. Reducing water use, through more drought tolerant plant material, is the number one priority of the turfgrass industry. This research needs to be continued and expanded because of the excellent ongoing research as well as the potential for the future.

4) Request new funding of new research on water quality improvement at two ARS installations @ \$450,000 each (Total: \$900,000)

Finally, the turfgrass industry requests funding for water quality improvement research at University Park, PA and Madison, WI; \$450,000 for each location. Water quality improvement is very important to the turf industry. There is much speculation that fertilizers and pesticides applied to turf areas contribute to the contamination of streams, waterways and groundwater. Very little research has been conducted to date that proves or disproves this phenomenon. Therefore, answers are needed to make good production, management and regulatory decisions. In addition, the turf industry is concerned about our natural environment and wants to protect it. Therefore, research data is needed to understand the scope of the problem, as well as to develop practical solutions. To address the areas with the most critical needs, we propose funding for research at the following two locations:

University Park, PA, (\$450,000) - According to the EPA, runoff and groundwater contamination in the Chesapeake Bay Watershed is one of the critical contributors to the decline of Bay water quality. Although many industries have been implicated, fertilizer applications to lawns and golf courses are routinely mentioned as significant factors in this decline. Research to address this issue is virtually non-existent, yet is critical to the success of the turf industry in the Mid-Atlantic, as well as New England. The ARS lab at University Park is already researching these issues relating to pasture and forage. Therefore, they are uniquely positioned and they have expertise and facilities in place. We request that funding be allocated to hire a scientist dedicated to turf research.

Madison, WI, (\$450,000) - The other area of the U.S. with significant water quality concerns is the Upper Midwest. Phosphorus contamination in the region is the most pressing problem, with other nutrients also of concern. Several states, including Minnesota and Wisconsin, have either

already instituted turf fertilizer regulations or are considering them. ARS has facilities at Madison and Marshfield, WI, which have initiated research on dairy manure contamination and disposal. This is an excellent location to address the turf-related water quality issues in that region, issues that demand solutions to ensure the survival of the turf industry.

### THE NATIONAL TURFGRASS RESEARCH INITIATIVE

This Initiative has been developed by USDA/ARS in partnership with the turfgrass industry. The USDA needs to initiate and maintain ongoing research on turfgrass development and improvement for the following reasons:

1. The value of the turfgrass industry in the U.S. is \$40 billion annually. There are an estimated 50,000,000 acres of turfgrass in the U.S. Turfgrass is the number one or two agricultural crop in value and acreage in many states (e.g., MD, PA, FL, NJ, NC).
2. As our society becomes more urbanized, the acreage of turfgrass will increase significantly. In addition, state and local municipalities are requiring the reduction of water, pesticides and fertilizers on turfgrass. However, demand on recreational facilities will increase while these facilities will still be required to provide safe turfgrass surfaces.
3. Currently, the industry itself spends about \$10 million annually on applied and proprietary turfgrass research. However, private and university research programs do not have the time nor the resources to conduct basic research and to identify completely new sources of beneficial genes for stress tolerance. ARS turfgrass scientists will enhance the ongoing research currently underway in the public and private sectors. Because of its mission to conduct the nation's research for agricultural commodities, ARS is the proper delivery system for this research.
4. Water management is a key component of healthy turf and has direct impact on nutrient and pesticide losses into the environment. Increasing demands and competition for potable water make it necessary to use water more efficiently. Also, drought situations in many regions have limited the water available and, therefore, have severely impacted the turf industry as well as homeowners and young athletes. Therefore, new and improved technologies are needed to monitor turf stresses and to schedule irrigation to achieve the desired quality. Technologies are also needed to more efficiently and uniformly irrigate turfgrasses. Drought tolerant grasses need to be developed. In addition, to increase water available for irrigation, waste water (treated and untreated) must be utilized. Some of these waste waters contain contaminants such as pathogens, heavy metals, and organic compounds. The movement and accumulation of these contaminants in the environment must be determined.
5. USDA conducted significant turfgrass research from 1920-1988. However, since 1988, no full-time scientist has been employed by USDA, Agricultural Research Service (ARS) to conduct turfgrass research specifically, until the recently appropriated funds became available.

ARS and the turfgrass industry enjoy a special, collaborative relationship, and have even entered into a cooperative Memorandum of Understanding (MOU). The turfgrass industry has met on numerous occasions with USDA/ARS officials to discuss the new turfgrass scientist positions, necessary facilities, and future research opportunities. In January 2002, ARS held a customer workshop to gain valuable input from turfgrass researchers, golf course superintendents, sod

producers, lawn care operators, athletic field managers and others on the research needs of the turfgrass industry. As a result of the workshop, ARS and the turfgrass industry have developed the National Turfgrass Research Initiative. The highlights of this strategy are as follows:

ARS, as the lead agency at USDA for this initiative, has graciously devoted a significant amount of time to the effort. Like the industry, ARS is in this research endeavor for the long-term. To ARS' credit, the agency has committed staff, planning and technical resources to this effort. Last year was the first time ARS has been able to include some funding in the President's budget for the Turfgrass Research Initiative. However, there are so many issues and needs, that the industry is desperate for answers. Thus, to address the critical research needs, the industry is left with no alternative but to come directly to Congress for assistance through the appropriations process.

The role and leadership of the federal government and USDA in this research are justifiable and grounded in solid public policy rationale. ARS is poised and prepared to work with the turfgrass industry in this major research initiative. However, ARS needs additional resources to undertake this mission.

The turfgrass industry is very excited about this new proposal and wholeheartedly supports the efforts of ARS. Since the customers at the workshop identified turfgrass genetics/germplasm and water quality/use as their top priority areas for ARS research, for fiscal year 2008, the turfgrass industry requests that the six positions above be established within USDA/ARS.

For this research we propose an ARS-University partnership, with funding allocated to ARS for in-house research as well as in cooperation with university partners. For each of the individual scientist positions, we are requesting \$300,000 for each ARS scientist position with an additional \$150,000 attached to each position to be distributed to university partners, for a total of \$450,000 per position. We are also asking that the funding be directed to ARS and then distributed by ARS to those university partners selected by ARS and industry representatives.

In addition, the Committee should be receiving Senators' requests for funding of each of the positions described above. We appreciate your strong consideration of each individual member request for the turfgrass research position in his or her respective state.

In conclusion, on behalf of the National Turfgrass Federation and the turfgrass industry across America, I respectfully request that the Subcommittee continue in fiscal year 2008 the funding appropriated in fiscal year 2007 for Beltsville, MD, (\$490,000) within the Agricultural Research Service. I also request that the committee support the President's budget request (or new funding) of \$1,880,000 for Drought Mitigation. Third, I request the Subcommittee's support of ongoing research programs at Beaver, WV and Logan, UT @ \$450,000 each. Finally, I request that the Subcommittee appropriate an additional \$900,000 for two new water quality research positions, at University Park, PA and Madison, WI, with \$450,000 provided for each location.

Thank you very much for your consideration and support.

#### PARTNERING ORGANIZATIONS

Golf Course Superintendents Assoc. of America  
Irrigation Association  
National Turfgrass Evaluation Program

Professional Landcare Network  
Turfgrass Producers International  
United States Golf Association  
Various State Land Grant Universities