April 6, 2026

Natalie Bray
Pesticide Registration Division (7505T)
Office of Pesticide Programs
Environmental Protection Agency Docket Center
1200 Pennsylvania Ave., NW
Washington, DC 20460-0001

Re: Agency Information Collection Activities: Proposed New Collection and Request for Comment; Process To Become an EPA Qualified Conservation Program (QCP) and Qualified External Party (QEP); Draft Pesticide Registration Notice

Docket ID EPA-HQ-OPP-2025-1906

The Golf Course Superintendents Association of America (GCSAA) is submitting these comments regarding the Proposed New Collection and Request for Comment (ICR); Process To Become an EPA Qualified Conservation Program (QCP) and Qualified External Party (QEP); Draft Pesticide Registration Notice.

The comments provided in this letter are intended to represent GCSAA members and the golf sector more broadly. They should not be interpreted as a response on behalf of other non-agricultural sectors to the Agency's Information Collection Request.

GCSAA is the professional association for the men and women who manage and maintain the game's most valuable resource — the golf course. The golf industry recognizes the association as a key contributor in elevating the game and business. Since 1926, with a focus on golf course management, GCSAA has been the top professional association in the United States and worldwide. Headquartered in Lawrence, Kan., it provides education, information and representation to more than 20,000 members in more than 78 countries. Its mission is to serve its members, advance their profession and improve communities through the enjoyment, growth and vitality of the game of golf.

Addressing the Agency's Broader Inquiry

As stated in the Information Collection Request, the Environmental Protection Agency (EPA) is considering expanding the process to also qualify conservation programs and external parties that support non-agricultural (e.g., turf, nursery/ornamentals, forestry, rights of way) uses. Additionally, the EPA intends to develop a mitigation menu for non-agricultural uses. However, this menu has not yet been developed.

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In this collection request, the EPA is asking: 1) Are there conservation programs that cover non-agricultural use sites that could want to be qualified? 2) Would there be value to qualify external parties for non-agricultural use sites? 3) And if yes to either of these questions, would the applications in their current form be relevant for these programs or parties seeking qualification?

The answer to question (1) is that, "yes," there are conservation programs that cover non-agricultural use sites that could want to be qualified. The GCSAA launched a landmark Best Management Practices initiative in 2017 which will be described in more detail later, and the GCSAA would like to work with the Agency to see how golf courses could get credit for their beyond-compliance work on BMPs related to ESA.

The answer to question (2) is that, "yes," there would be value to qualify external parties for non-agricultural use sites. Currently, there are approximately 15,000 operating golf courses across the United States. In order to incentivize the implementation of effective run-off and spray drift minimization practices and to confirm that those practices are regularly implemented, it makes sense for the Agency and for its partner states to conserve resources by specifying the architectural requirements for conservation programs and then by endorsing those programs and parties that meet the minimum requirements. In this way, many qualified parties can help to manage new sectors like golf that potentially bring thousands of members into play to help mitigate exposure and risk for endangered and threatened species.

The answer to question (3) is also "yes" but, the existing ESA framework for agriculture would have to be modified or tailored to effectively cover the varying, unique conservation strategies of golf and to use terminology that is familiar to the golf industry.

About Golf

Before we share our comments on why GCSAA's BMPs program is relevant to this ICR, we want to share at a high level a picture of golf course land use characteristics.

An average 18-hole golf facility spans 150 acres, of which almost one third consists of natural areas which consist of non-turf, non-managed areas. The remaining roughly 95 acres of managed areas feature the following components:

- Tees: the starting point for each hole 3 acres
- Greens: the area where the hole or "cup" is located 3 acres
- Fairways: the main playing area between the tee box and the green 30 acres
- Roughs: the areas surrounding the fairway, often with longer grass 51 acres
- Driving range and practice areas 7 acres
- Turf-grass plots for emergency repair 1 acre

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There are only roughly 6 acres of tees and greens that are intensively managed on the golf course. Throughout the golf course, wildlife is ever present and protection of wildlife and threatened and endangered species is paramount.

The Quality of Our Superintendents

Today's golf course superintendents are educated professionals who care about environmental quality. Golf course superintendents have a high degree of pesticide stewardship and IPM education, due to a combination of state certification requirements as well as certification and training requirements set by GCSAA. Many of today's superintendents have college degrees and substantial continuing education. Superintendents are the nation's leading practitioners of integrated pest management, a philosophy that reduces the potential environmental risks of pesticide usage. Virtually all golf courses employ at least one state licensed pesticide applicator who is trained in environmentally sound pesticide use.

Pest problems on golf courses are often relatively predictable or can be diagnosed as part of an ongoing monitoring program. Once the problem has been identified, the superintendent considers the available options. These could include cultural practices (such as physically removing weeds, changing irrigation patterns or clearing underbrush around a problem area to allow more air movement) or the use of biological controls or chemical products. Once the problem is diagnosed and the right treatment has been selected, the superintendent waits for the ideal time to treat the problem in the most effective and environmentally sound manner available.

GCSAA offers professional certification programs that enable golf course superintendents and golf course equipment technicians to be recognized at the highest level of their professions. The Certified Golf Course Superintendent (CGCS) designation is bestowed upon those who voluntarily meet the stringent requirements. The CGCS designation is the most widely recognized in the golf industry and the highest recognition that can be achieved by golf course superintendents.

GCSAA Best Management Practices and Integrated Pest Management

Professional pest management is an integral part of golf course operations. From cultural practices, scouting and proper pest identification to actual pest control measures, the process requires skill, knowledge and training for success. That success comes from the golf course superintendent, the professional who is responsible for the golf course landscape. Proper planning, documentation and review of pest control practices, as well as all the cultural practices that provide for healthy turfgrass, are essential to the course operations.

Golf course BMPs developed by GCSAA, already include reasonable and feasible protective measures that effectively minimize pesticide exposure to endangered and threatened species and their habitat. These include applying pesticides sparingly, always making targeted applications with

equipment that minimizes potential exposure and employing IPM-based pest management programs that allow for maintenance of habitat and contribute positively to endangered and threatened species conservation.

GCSAA has nationally implemented a Best Management Practice guide which among many practices, addresses Integrated Pest Management, setting voluntary standards that guide our superintendents to use the most sustainable practices that best steward the environment.

GCSAA met its 2020 goal that all 50 states would have a comprehensive agronomic and environmental BMP program at the state level. To support this initiative, GCSAA provided its members and chapters a How To Guide. GCSAA's BMP Planning Guide and Template is an online resource that provides for the development of golf course best management practices (BMP) programs at the state level. The need for state-level BMP programs and, ultimately, golf facility-written BMP plans for nutrient, drought, and water management and integrated pest management (IPM) is greater than ever. Golf courses, many of which are in urban environments under the watchful eye of concerned citizens, face heightened scrutiny from the public, media and special interest groups regarding the use of inputs (that is, water, pesticides, etc.) and commonly held misconceptions about golf course management. It is critical that the golf industry demonstrate sustainable methods of land management. GCSAA's BMP Planning Guide and Template made it easy for golf course superintendents to follow the key steps in developing a golf course management state BMP program. GCSAA has now turned into phase two of the BMPs initiative and is working toward the production of individual facility BMP manuals. Work has also begun on Phase 3 of the BMP initiative which is facility validation and verification.

GCSAA's Vision for a Conservation Program Tailored to Golf

GCSAA has been working with its members on sustainable approaches to golf for many, many years. In 2005, we began to work on a formalized approach to define sustainable strategies and measures in golf that could be readily implemented by golf course superintendents. Now, as EPA begins to look at sectors beyond agriculture to aid in protecting endangered and threatened species, we feel that we have a product that has been at least two decades in development that could be readily adapted to serve this purpose.

Specifically, GCSAA envisions taking portions of our Best Management Practices guide and translating them into a non ag mitigation menu designed to mirror the programs that EPA, USDA and others have created for the agriculture sector. Of course, some of agricultural practices can be used for golf but others do not translate so easily. There are a whole set of practices (included in GCSAA's BMP Guide) and a familiar terminology for the golf industry that we would need to be engrained in a successful mitigation menu tailored for golf. In addition, GCSAA has recently been working on a validation program under which course managers could provide verification that they are indeed implementing the best management practice measure that they committed to implement.

The goal for golf is identical to the goal for agriculture and that is to provide a practical and effective pesticide mitigation program that land managers across the country can realistically implement. The golf conservation program supports golf's participation in risk mitigation through preventative measures that protect public health, preserve environmental quality, and safeguard endangered species that rely on the extensive green space found on golf courses.

To translate this goal into practice, it is important to first define the areas of the golf course subject to management and then outline a clear process for meeting mitigation requirements. The areas managed on a golf course include tees, fairways, roughs, greens, water features, practice areas, and the common grounds where you can find the clubhouse and parking lot. To meet regulatory expectations, golf courses could follow a structured process to determine how many mitigation points are required and to confirm that enough mitigation measures have been implemented to meet or exceed that requirement.

Step by Step Methodology Matching The Golf Conservation Program To The Existing Agriculture Conservation Program

https://www.epa.gov/pesticides/mitigation-menu - EPA Mitigation Menu

Step 1: Plan for the Growing Season/Year

As stated in the EPA Mitigation Menu, this process would begin by identifying the pesticide product planned for use during the year that carries the highest mitigation point requirement. This value serves as the benchmark for the entire operation for the calendar year. It represents the maximum number of mitigation points that must be achieved in order to maintain regulatory flexibility across all pesticide products used on the course.

Step 2: Identify Which Products Planned for Your Application Require Points

As stated in the EPA Mitigation Menu, for the pesticide products identified in Step 1, identify any product labels or bulletins specify that runoff/erosion mitigation points that need to be achieved.

Step 3: For Those Products in Step 2 Requiring Points, Which Applications Require Points

As stated in the EPA Mitigation Menu, evaluate the course features being treated. You do **not** have to implement any additional runoff/erosion measures for an application if the answer is "yes" to any one of the following questions. The questions on the current Mitigation Menu have yet to be defined for a golf course setting and would do so in a meeting with agency officials. We also took note of the reference to: Is the application occurring as a spot treatment? A golf course setting is different than an agricultural field. This would need to be redefined, and this is further discussed below.

Step 4: Identify the Maximum Points Needed

As stated in the EPA Mitigation Menu, determine which product being used throughout the calendar year requires the highest number of mitigation points. This is the starting point that defines the maximum number of points or points benchmark you will need. In Step 5, you will determine the extent to which your location, field characteristics, and existing practices reduce or eliminate the need for any additional runoff mitigations.

Step 5: Subtract Points for Existing Mitigation Measures

As stated in the EPA Mitigation Menu, identify the total (sum) number of points assigned for mitigation relief based on your location and field characteristics and the number of points assigned to mitigation measures that already apply to the field/farm by visiting the mitigation menu.

Attachment B - Table 1, "**Mitigation Relief Options**," from our comments can be used for this purpose with some noted changes to accommodate golf. This table accounts for factors such as location, field characteristics, and existing practices. By reviewing this table, the course manager can calculate the total number of base mitigation points that apply. These points form the foundation of the overall mitigation total and should be carefully documented.

After establishing the base points, the course manager then evaluates additional mitigation practices using Attachment B - Table 2, "**Runoff/erosion mitigation options**" from these comments. This table includes common practices that may already be in place or could be implemented to further reduce runoff risk. Each qualifying practice potentially contributes to additional mitigation points, provided it meets the specified criteria. These points are added to the base total, increasing the overall mitigation score. Changes would also be required in this table to accommodate golf.

Step 6: Select Additional Mitigation Measures to Implement

As stated in the EPA Mitigation Menu, visit the mitigation menu to determine what measures are available for you to choose to fulfill the needed runoff/erosion requirements. For each measure, click on the associated link to see the minimum specification needed to successfully implement the measure.

Our modified process continues with Attachment B - Table 3, **"Golf Best Management Practices,"** from these comments which focuses specifically on practices tailored to golf course operations. (In Table 3, GCSAA has provided only a sample of 27 BMPs that we have compiled and which our stakeholders recognize as effective and practical, directly related to peer-reviewed research, documentable and reportable.) By identifying and implementing applicable measures from this table, the course can earn additional mitigation points that reflect industry-specific stewardship practices. These points (which are to be determined) are added to the cumulative total.

At the conclusion of this process, all mitigation points from Tables 1 through 3 are summed up and

compared to the benchmark requirement established at the beginning of the process. If the total number of mitigation points earned is equal to or greater than the required mitigation points benchmark, the golf course has met the necessary threshold and may use its pesticide products with the regulatory flexibility provided on the product label and through Bulletins Live Two. It is essential, however, that all mitigation measures are properly documented, including when and how they are implemented.

Some Mitigation Measures for Agriculture Are Not Easily Transferable to Golf

There are practical challenges related to how certain mitigation measures are defined and applied in the golf course context. Activities such as **spot-spraying**, as well as site characteristics like field slope, require clear and practical interpretation to ensure consistent implementation without creating unnecessary administrative burden. For example, the concept of spot-spraying is different to define on a golf course, where many pesticide applications are already highly targeted compared to typical agricultural practices. Without a clear definition, nearly all applications could be interpreted as spot treatments, which diminishes the usefulness of the distinction and argues for universal points to be provided to golf course management.

Similarly, determining **slope** presents challenges due to the varied terrain of a golf course. It is unclear whether slope should be measured on greens, fairways, tee boxes, or across entire holes, each of which could produce significantly different results. This variability has important implications for how mitigation requirements are calculated and applied. Notably, the areas of the golf course that receive the most intensive nutrient and pesticide applications—such as greens and tees—are also typically the flattest areas, further confounding the relevance of slope-based criteria.

In EPA's Mitigation Menu, we took note that "Working with and following recommendations from a technical specialist" or "Participating in a conservation program" or "Participating in an EPA-Qualified Conservation Program" are worth between 1 or 2 or 9 points and is its own standalone mitigation. Including conservation program(s) to golf as a mitigation require additional discussion.

Taken together, these considerations highlight the need for a collaborative and practical approach to interpreting mitigation requirements for golf courses. Clear, workable definitions and guidance will be essential to ensure that environmental objectives are met without imposing unnecessary complexity or inconsequential recordkeeping burdens on golf course managers.

Validating BMP Implementation – A New GCSAA Validation Tool in the Works

As envisioned prior to 2017, GCSAA intends to create and provide a tiered validation tool that allows golf courses to document the mitigation measures they have adopted, track the number of points earned, and generate reports demonstrating implementation over time. This tool is designed to

make it easier for courses to show compliance with auditors and regulatory authorities.

The level of documentation and verification can vary depending on the needs of the golf course and the expectations of state regulators. In our current vision of a tiered BMP validation program, ranging from the Bronze level validation which is based on self-attestation through more rigorous Silver and Gold tiers that include third party record review, validation and/or 3rd party on-site audits. The course manager calculates the required mitigation points, documents the applicable base and supplemental measures, and then confirms through the software that the total points for the implemented mitigation measures meet or exceed the benchmark requirement for the product with the highest required mitigation points. The validation system stores and organizes the supporting documentation.

GCSAA further envisions that Qualified External Party (QEP) designees would play an important role in supporting the validation program at certain tiered levels. As EPA has noted — and GCSAA agrees — the success of this approach depends on QEPs having credible backgrounds and demonstrated functional expertise. Without this level of credibility and technical competence, the validation framework will not achieve its intended purpose. (GCSAA provides additional recommendations for the qualifications and role of QEPs later in this comment letter and in Appendix A.)

Financial Support for Mitigation Measures Differs Across Sectors

Unlike agricultural producers, golf course land managers generally do not have access to federally funded cost-share programs like the USDA's CRP and EQIP programs that support conservation practices such as soil health improvement, erosion control, wildlife habitat development, and water management. In the agricultural sector, these funding programs often help offset the cost of implementing practices that also qualify as mitigation measures. In contrast, golf courses must typically absorb these costs independently, which places greater reliance on the common-sense but effective Best Management Practices (BMPs) conservation program developed and promoted by GCSAA.

GCSAA Responses to the Questions Posed in the Agency Information Collection Activities; Proposals, Submissions, and Approvals: Process To Become an EPA Qualified Conservation Program and Qualified External Party; Draft Pesticide Registration Notice

In response to the specific questions posed by the Agency in this ICR, GCSAA has listed each question below and provided corresponding comments. As the representative organization for golf courses and an educator of golf course superintendents, GCSAA has a direct interest in both the ICR and the mitigation menu approach under review, particularly as the golf sector is among the non-agricultural sectors receiving increased scrutiny for its use of pesticide products.

A. How can EPA improve its proposed process to review and approve QCPs and QEPs?

1. **The EPA would like feedback on the two applications described in the draft PR Notice. Specifically, are the instructions and questions in the applications clear? If not, please feel free to provide suggestions of how to clarify the instructions or questions.**

   GCSAA notes that, in practice, there will be three entities involved in ensuring proper practices are defined, implemented and audited. In golf, there will likely be the Superintendent (referred to as "grower" under the Ag program) the EPA Qualified Conservation Program (QCP) which (in the case of golf) would be developed and provided by GCSAA in concert with our science and land manager experts as well as our golf course superintendents, and the Qualified External Parties (QEPs) which are third party entities that are intimately familiar with the mitigation menu and which is distributed nationally and positioned to conduct validation audits either on-site or via a record audit. The EPA's application process does not seem to clarify the distinctions in these roles.

   EPA's Agricultural Mitigation Menu does not apply well to golf so, reference to "EPA's Mitigation Menu" in questions 1.7 and 2.7 should be amended to broader language allowing for multiple menus depending on the sector.

   EPA may want to create an application form for the grower/superintendent so that they can identify their plans to work with a QCP to document, measure, confirm implementation of the proper measures in the mitigation menu. In addition, this additional application should provide directions and a space for response in the case that a grower/superintendent falls short under the QEP audit. In other words, is EPA directing landowners to begin to immediately implement a substitute measure or measures that are equally valued in points and to document them?

   GCSAA has included Attachment A, Table 1, at the end of this letter, which contains thoughts and recommendations on NGOs / Third-Party Audit Candidates including land grant universities and state extension offices. In addition, we offer the following recommendations on desirable characteristics for qualified external parties.

Common Characteristics of Qualified External Parties

Category	Description
Research Capability	Strong turfgrass, agronomy, or environmental science programs
Extension Infrastructure	Active field-level engagement with golf courses/agriculture
IPM Expertise	Established Integrated Pest Management programs
Regulatory Experience	Work with EPA and state agencies
Audit Potential	Ability to verify BMPs, pesticide use, and environmental outcomes

2. **Do any questions appear redundant or otherwise unnecessary for EPA to judge the quality of the program or organization/individual?**

   GCSAA did not identify any redundancy.

3. **The Agency is considering expanding this process to also qualify conservation programs and external parties that support non-agricultural (e.g., turf, nursery/ornamentals, forestry, rights of way) uses. Additionally, the EPA intends to develop a mitigation menu for non-agricultural uses. However, this menu has not yet been developed. Are there conservation programs that cover non-agricultural use sites that could want to be qualified? Would there be value to qualify external parties for non-agricultural use sites? If yes to either of these questions, would the applications in their current form be relevant for these programs or parties seeking qualification?**

   "Yes." GCSAA has been working with our members, researchers and regulators for many years on best management practices - a subset of which would make robust, credible impact mitigation measures on a formally recognized mitigation menu. In 2020, we worked with Chapters in each of our states (plus Washington, D.C. and Puerto Rico) to tailor these BMP manuals to include state interests and focus, as well. A narrative briefly describing this program is included in our opening remarks.

   "Yes." there would be value in working to qualify external parties for non-agricultural sites as this would improve self-policing and allow non-governmental parties to share the positive messages associated with the implementation of BMPs to achieve better public health and environmental outcomes.

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As mentioned above, with some relatively minor clarifications and amendments, these application forms could easily be used for non-agriculture sectors.

4. **Is there other or additional information that EPA should request to judge the program?**

At one point during information discussions, EPA asked GCSAA to crosswalk long-standing BMP practices with peer reviewed research which showed that there was a link between implementing the practice and improved soil conservation, public health and environmental outcomes. The application for QCP does not seem to include that request. We think that it is a good idea and strengthens the credibility of the program. For golf, if the QEP candidate comes from one of the categories recommended by GCSAA, we recommend that deference be given to the application because of their credentials in lieu of requiring a lengthy resume.

B. What information on the burden estimates associated with completion of the application can stakeholders provide?

1. **What amount of time would it take you or staff members in your organization to complete the application (please assign number of hours for each staff level involved—manager type, technical type and clerical type)?**

GCSAA estimates that the time it would take to complete the QCP application would be:

Management	4 Hours
Technical	20 Hours
Clerical	4 Hours

2. **EPA has estimated the burden to complete these applications to be 56 hours total time, see Information Collection Request Supporting Statement for more details of this estimate. If your estimate is significantly different from this estimate, please explain why yours is different and if you anticipate your estimate is more likely to represent the typical entity who may apply or not.**

GCSAA has previously invested countless hours in the creation and vetting of a scientifically defensible mitigation menu. In addition, our members have demonstrated self-discipline and a level of professionalism and stewardship that is unequalled in the private sector. Many organizations wishing to develop an application may have to start at the beginning of the process, which would indeed require significantly more hours.

C. What types of information can stakeholders provide for EPA to anticipate the level of interest to better plan for resource requirements?

1. **How many programs/organizations/individuals provide these services in your area? Please provide separate estimates for each group.**

   GCSAA is best positioned to lead the golf sector because of our connection with GCSAA members and chapters. Through our members, we already have connections to thousands of courses, far more than any other entity specializing in golf course maintenance and the environment. In addition, we do not intend to speak for other non-agriculture sectors in this comment letter.

2. **Given the burden that it would take to complete the applications, how likely is it that you or your program organization will apply to become a QCP or QEP?**

   It is likely that GCSAA will apply to have its national BMPs validation program be recognized as a QCP and we suspect that there are several organizations, non-profits, land grant universities, extension agents and private consultants interested in performing the QEP role for states and to support the program (See attachment A.)

D. How can the Agency implemented programs be subject to a re-review process on a 5-year cycle? Additionally, if any elements of the program change at any point the Agency proposes that the program or organization/individual is responsible for notifying EPA.

1. **Is 5-years an appropriate length of time for approvals to remain valid? If not, what time frame would be more appropriate for a re-review process and why?**

   The challenge is to provide a short enough review time to prevent any significant failures from recurring indefinitely while respecting the fact that re-review takes time and resources. For many regulatory agencies at the federal and state level, 5 years seems to be a reasonable and commonly used re-review time frame (e.g. Air Title V permits, Water NPDES permits and SPCC plans are valid for 5 years). In addition, this timeframe represents a reasonable balance of risk assurances and cost investment.

Conclusion

GCSAA appreciates the opportunity to provide input on this Information Collection Request and supports EPA's efforts to expand effective, science-based mitigation approaches beyond the agricultural sector. The golf industry is well-positioned to contribute meaningfully to these efforts through established Best Management Practices, a highly trained workforce, and a demonstrated commitment to environmental stewardship.

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We encourage EPA to work collaboratively with GCSAA to develop a tailored conservation framework for golf that reflects the unique characteristics of managed turf systems while promoting smart, beyond compliance approaches to minimizing risks to endangered and threatened species by preventing or mitigating exposures to pesticides before they occur. By leveraging existing BMPs and incorporating a practical approach, golf courses can serve as a model to successfully implement mitigation measures and achieve regulatory flexibility. GCSAA stands ready to assist the Agency in refining and implementing this framework and appreciates your consideration of these comments.

Thank you for allowing GCSAA to submit the above comments to the agencies. Please contact me at (800) 472-7878, ext. 3619 or cmckeel@gcsaa.org if you have additional questions or if you need additional information.

Sincerely,

Chava E. McKeel

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Attachment A: QEP Recommendations

Table 1: Recommendations on QEP Candidates

Organization	Type	Core Strengths	Relevant Expertise / Programs	Best Fit Role
Conservation Organizations	NGO/Non-Profit	Established golf sustainability certification; audit infrastructure	Habitat & water audits	Golf-specific sustainability certification & auditing
Golf/Soil Consulting Organizations	For Profit/Non-Profit	Water/Land management	Conservation programs, water management and sustainability	Environmental verification; water, energy, waste
State Extension Offices	State Government	Water research & Conservation	Turfgrass Research; Pesticide Safety Education; Agronomy	Environmental fate; runoff; IPM; Irrigation interactions;

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Attachment B: Proposal for Golf Mitigation Menu and Points

Table 1. Mitigation Relief Options (This Table is reflective of Table 1 in the EPA Mitigation Menu Website. Many of the mitigation measures listed in this table would require alterations to make them effective for the golf sector.)

Mitigation Relief	Pesticide Runoff Vulnerability and Field Characteristics	Points
County-based mitigation relief [see runoff vulnerability map by county and County list (pdf)] ***Select one option***	Pesticide runoff vulnerability - very low	6
	Pesticide runoff vulnerability – low	3
	Pesticide runoff vulnerability - medium	2
	Pesticide runoff vulnerability – high	0
Field slope – **REQUIRES TRANSLATION FOR GOLF**	Field slope ≤3% (naturally low slope or flat fields; flat laser leveled fields)	2
Mitigation tracking	Documented at the field or farm level, using paper or electronic format	1
Working with and following recommendations from a technical specialist **OR** Participating in a conservation program (non-qualified) ***Select one; points are not additive for doing both*** **REQUIRES TRANSLATION FOR GOLF**	**The technical specialist must meet the following characteristics:** • Have technical training, education and/or experience in an agricultural discipline, water or soil conservation, or other relevant disciplines that provides training and practice in the area of runoff or erosion mitigation technologies/measures; **and** • Participate in continued education or training in the area of expertise which should include runoff and erosion control; **and** • Have experience advising on conservation measures designed to develop site specific runoff and erosion plans that include mitigation measures described in Table 2 below.	1
	The conservation program must meet the following characteristics: • Provides advice from individuals who meet the same characteristics provided above for technical specialists; **and**	2

	• Provides site-specific guidance tailored to the grower/applicator's crop and/or location; **and** • Focuses on reducing or managing runoff and/or erosion (including for example, soil loss, soil conservation, water quality protection) from agricultural fields or other pesticide use sites; **and** • Provides documentation of program enrollment for the program enrollee. This documentation does not need to be provided to EPA; **and** ○ Includes verification of implementation of the recommended measures or activities (measures were established and maintained). Verification can be done through the conservation program and provided to the program enrollee. Verification is **not** required to be submitted to EPA. **Conservation programs will be 2 points until they have been designated by EPA as an EPA-Qualified Conservation Program.**	
Participating in an EPA-Qualified Conservation Program **REQUIRES TRANSLATION FOR GOLF**	**The conservation program must meet the characteristics described above and meet the maximum of 9 points.** **Additionally:** • Operations that consist of multiple distinct "farms" that consist of multiple fields with similar runoff/erosion concerns, need to have a program implemented on each farm, **and** • Programs would achieve a minimum of 9 points at the time of application, which would include 2 points for being part of a conservation program, **and** • A program would maintain the above elements once it has been "qualified." The rationale and additional characteristics that are necessary to support designation as an EPA-Qualified Conservation Program are described in more detail in the Final Insecticide Strategy and Ecological Mitigation Support Document V.2 1. (pdf) (5.06 MB)	9
	EPA's first designated "EPA-Qualified Conservation Program" USDA-Natural Resources Conservation Service's (NRCS)	9

	Environmental Quality Incentives Program (EQIP), when incorporating NRCS Conservation Program Standard (CPS) 595 Pest Management Conservation System with the "Additional Criteria" for water quality in the development of the conservation plan, and implements the recommended practices identified in the conservation plan before or at the time of pesticide application.	

Table 2. Runoff/erosion mitigation options (This Table is reflective of Table 2 in the EPA Mitigation Menu Website. Many of the mitigation measures listed in this table would require alterations to make them effective for the golf sector.)

Mitigation	Qualifying Practices	Points
Application parameters		
Annual application rate reduction ***Select one option*** **REQUIRES TRANSLATION FOR GOLF**	Any application 10% to <30% less than the maximum labeled annual application rate	1
	Any application 30% to <60% less than the maximum labeled annual application rate	2
	Any application ≥60% less than the maximum labeled annual application rate	3
Anionic Polyacrylamide (PAM)	Application of water-soluble formulations of anionic PAM	2
Reduction in the proportion of field treated (banded application, partial field treatment, ground precision sprayer, smart sprayer, or other specialized method) ***Select one option*** **REQUIRES TRANSLATION FOR GOLF**	Portion of field not treated: 10 to <30%	2
	Portion of field not treated: 30 to <60%	3
	Portion of field not treated: ≥60%	4
Soil incorporation **REQUIRES TRANSLATION FOR GOLF**	Watering-in or mechanical incorporation before a runoff producing event. A runoff producing event is considered as follows: • A 50% or greater chance of rainfall of 1 inch or more is expected to occur within 48 hours of the application as predicted by the NOAA/National Weather Service. AND, • The precipitation potential is 50% or greater at any point during the 48-hr period.	1

In-field mitigation measures		
Conservation tillage ***Select one option*** **REQUIRES TRANSLATION FOR GOLF**	No-till, including perennial crops (e.g., orchards that are not tilled)	3
	Reduced tillage, strip tillage, ridge tillage, mulch tillage	2
Reservoir tillage **REQUIRES TRANSLATION FOR GOLF**	Reservoir tillage, furrow diking, basin tillage	3
Contour farming **REQUIRES TRANSLATION FOR GOLF**	Contour farming, contour tillage, contour orchard and perennial crops	2
Vegetative Strips - In-Field **REQUIRES TRANSLATION FOR GOLF**	Inter-row vegetated strips, strip cropping or intercropping, alley cropping, prairie strips, contour buffer strips, contour strip cropping, vegetative barrier (occurring in a contoured field)	2
Terrace farming **REQUIRES TRANSLATION FOR GOLF**	Terrace farming, terracing, field terracing	2
Cover crop or continuous ground cover ***Select one option*** **REQUIRES TRANSLATION FOR GOLF**	Cover crop or continuous ground cover; with tillage	1
	Cover crop or continuous ground cover; no tillage; short-term cover crop	2
	Cover crop or continuous ground cover; no tillage; long-term cover crop	3
Irrigation water management ***Select one option*** **REQUIRES TRANSLATION FOR GOLF**	Use of soil moisture sensors/evapotranspiration meters with center pivots & sprinklers; above ground drip tape, drip emitters; micro-sprinklers General irrigation management	2
	Use of below tarp irrigation, below ground drip tape; dry farming, non-irrigated lands	3

	No irrigation	
Mulching ***Select one option*** **REQUIRES TRANSLATION FOR GOLF**	Mulching with permeable artificial materials (i.e., landscape fabrics, synthetic mulches)	1
	Mulching with natural materials	3
Erosion barriers **REQUIRES TRANSLATION FOR GOLF**	Wattles, silt fences	2
Field-adjacent mitigation measures		
Grassed waterway **REQUIRES TRANSLATION FOR GOLF**	Grassed waterway	2
Vegetative filter strips (VFS) or field border adjacent to field ***Select one option*** **REQUIRES TRANSLATION FOR GOLF**	20 to 30 ft wide	1
	30 to <60 ft wide	2
	≥60 ft wide	3
Vegetated ditch **REQUIRES TRANSLATION FOR GOLF**	Vegetated ditch	1
Riparian area; riparian forest buffer; riparian herbaceous cover ***Select one option*** **REQUIRES TRANSLATION FOR GOLF**	20 to <30 ft	1
	30 to <60 ft	2
	≥60 ft	3
Constructed and natural wetlands **REQUIRES TRANSLATION FOR GOLF**	Constructed and natural wetlands, wetland and riparian landscape/habitat improvement	3
Terrestrial habitat landscape improvement (i.e., critical area planting, cross wind trap strips, hedgerow planting, herbaceous wind barriers, windbreak-shelterbelt establishment and renovation, tree shrub planting, forest stand improvement, upland wildlife habitat management)	20 to <30 ft	1
	30 to <60 ft	2
	≥60 ft	3

Select one option **REQUIRES TRANSLATION FOR GOLF**		
Filtering devices ***Select one option*** **REQUIRES TRANSLATION FOR GOLF**	Filters, sleeves, socks, or filtration units containing activated carbon	3
	Filters, sleeves, socks, or filtration units containing compost amendments	1
Systems that capture runoff and discharge		
Water retention systems **REQUIRES TRANSLATION FOR GOLF**	Sediment basins, catch basins, sediment traps, water retention ponds	2
Subsurface drainages and tile drainage installed without controlled drainage structure **REQUIRES TRANSLATION FOR GOLF**	Subsurface tile drains, tile drains without controlled drainage structure	1
Using mitigation measures from multiple categories **REQUIRES TRANSLATION FOR GOLF**	Practices must be used from at least 2 of the following categories: in-field, field-adjacent, or systems that capture runoff and discharge Examples: 1 in-field measure + 1 field-adjacent measure OR 1 in-field measure + 1 system that captures runoff and discharge OR 1 field-adjacent measure + 1 system that captures runoff and discharge	1

Mitigation (X)	Qualifying Practices	Points
Application parameters		
Annual application rate reduction ***Select one option*** **REQUIRES TRANSLATION FOR GOLF**	Any application 10% to <30% below the maximum labeled annual application rate	1
	Any application 30% to <60% below the maximum labeled annual application rate	2
	Any application ≥60% below the maximum labeled annual application rate	3
Anionic Polyacrylamide (PAM) **REQUIRES TRANSLATION FOR GOLF**	Application of water-soluble formulations of anionic PAM	2
Reduction in the proportion of course treated (banded application, partial field treatment, ground precision sprayer, smart sprayer, or other specialized method) ***Select one option*** **REQUIRES TRANSLATION FOR GOLF**	Portion of course not treated: 10 to 29%	2
	Portion of course not treated: 30 to 59%	3
	Portion of course not treated: Greater than 60%	4
Total Common Points		

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Table 3: Golf Best Management Practices (GCSAA notes that this table contains a sampling of over 25 Best Management Practices focused on spray drift and runoff protection identified by our stakeholders as particularly effective, backed by research and documentable and reportable.)

BMP CATEGORY	BEST MANAGEMENT PRACTICE – DESCRIPTION	BMP CLASSIFICATION	Points
BUFFER AREAS	Use turf and native plantings to enhance buffer areas. Increase height of cut in the riparian zone to filter and buffer nutrient movement to the water. Recognition also that turf is a vegetative filter strip.	Run-off & erosion	TBD
COVER CROP	Maintain turfgrass or other vegetation suitable for the areas to prevent bare soils and implement sprigs, seedings, etc. for weak turfgrass areas in order to maintain adequate ground cover. (Turf is not a row crop and provides ground cover.)	Run-off & erosion	TBD
IPM	Use IPM principles to limit excess use of pesticides.	Education & Stewardship	TBD
BOOM HEIGHT	Utilize boom height 24” or under.	Drift reduction	TBD
MIX AND LOAD	Store, mix, and load pesticides away from sites that directly link to surface water or groundwater.	Education & Stewardship	TBD
DEFLECTOR SHIELD	Use a deflector shield to prevent fertilizer and pesticide spills from contacting surface waters.	Run-off & erosion	TBD
TIMING OF PESTICIDE APPLICATIONS	Decide which pest management practice(s) are appropriate and carry out corrective actions. Direct control where the pest lives or feeds. Use properly Education & Stewardship timed preventive chemical applications only when your professional judgement indicates they are likely to control the target pest effectively, while minimizing the economic and environmental costs.	Education & Stewardship	TBD