



2026 Midwest Student Design Competition

COMPETITION GUIDELINES

INTRODUCTION: The [Central States Water and Environment Association](#) (CSWEA) Midwest Student Design Competition (MSDC) is intended to promote real world and hands on design experience for students interested in pursuing an education or career in the water/wastewater engineering and science fields. This year, the 7th Annual MSDC will be held on **Thursday, April 16, 2026**, in Madison, Wisconsin at the Monona Terrace Convention Center. This competition provides a unique opportunity for students at the college level to demonstrate their science and engineering skills and practices by researching and preparing a design for a water quality-based project and presenting their project to water industry professionals.

There are three (3) categories available for student teams to compete at the MSDC:

- WEF Wastewater Category
- WEF Water Environment Category
- GWS Category – “Global Water Stewardship – San Rafael de Guatuso, Costa Rica”

WEF Categories: The [Water Environment Federation](#) (WEF) categories at the MSDC are intended to feed into the national [WEF student design competition](#) at the WEFTEC conference on September 27th, 2026, in New Orleans, Louisiana. The WEF categories require student teams to develop a problem statement that shall guide a student team’s design. The scope and extent of the project should be consistent with the level of a senior or graduate engineering/science design or capstone course. **There are two WEF categories;**

1) [Wastewater Design Category](#) which includes, but is not limited to, traditional wastewater collection and treatment design projects, e.g., hydraulic capacity design, upgrades to existing treatment systems, biosolids handling, small-scale community wastewater treatment designs, and other related topics.

2) [Water Environment Design Category](#) which includes, but not limited to, design projects related to stormwater management, watershed management, green infrastructure, low impact development, water reuse, wetland construction, distributed treatment systems, groundwater treatment, drinking water treatment systems, and other related topics.

Being part of a WEF Student Chapter is not required to compete at the MSDC. However, students from the winning team(s) must register as WEF student members to participate in the international WEF student design competition hosted at the annual WEFTEC conference.

**** Each student team must develop a problem statement if competing in either of the WEF categories. WEF Problem Statements may be available for student selection if requested. This problem statement (not to exceed 200 words) shall be provided on the student team entry form.*

Global Water Stewardship Category: The [Global Water Stewardship](#) (GWS) Category requires student teams to design a centralized wastewater treatment facility and collection system for a Costa Rican community that has been chosen as a partner community by the Global Water Stewardship NGO. This year’s problem statement is titled “Global Water Stewardship: San Rafael de Guatuso, Costa Rica”.

**** Global Water Stewardship will provide all teams competing in the GWS category with a problem statement including all design requirements. SHARED FOLDER FOR GLOBAL WATER STEWARDSHIP PROBLEM STATEMENT AND ACCOMPANYING DOCUMENTS HERE:[2026 San Rafael de Guatuso](#)*

WORKLOAD: All projects shall include a problem statement, a development of alternatives, and a recommended solution. The depth of the effort should be comparable to preliminary design. A key criterion in the judging of the competition is the manner and level of effort spent in evaluating the alternatives, usually presented in the form of a decision matrix. Students are expected to work with little assistance from an advisor and/or professor and are expected to work as a team to find a solution to their problem. Students may use whatever references or resources they choose.

REQUIREMENTS: Student teams may consist of more than four (4) members, but only four (4) students may present at the competition. Student teams will compete through oral presentations, in PowerPoint (slide deck) format. Each presentation will be 15 minutes followed by a 10-minute question and answer period. *A design report is NOT required for the MSDC.* Although your University curriculum may require submission of a design report as part of a capstone or senior design course, the only requirement for the MSDC is the oral presentation and Q&A participation as these are the only items that are used for scoring.

TIMELINE: **February 2026 (Date/Time TBD):** Informational webinar to review MSDC guidelines and answer any questions from students or faculty. Webinar will be recorded for anyone who cannot attend.

March 6, 2026: Entry Form is due. Submit to Joe Lapastora at lapastora@nmwrd.org or Emma Forthaus at eforthaus@msa-ps.com.

April 16, 2026: CSWEA Midwest Student Design Competition will be held in Madison, Wisconsin at the Monona Terrace Event Center. Start time and day of logistics will be shared closer to the competition date.

SCORING: Judges will consist of professionals in the water/wastewater industry. They will score the designs based on 15-minute oral presentations and 10-minute Q&A sessions. The category winners will be announced on the day of the competition, and the results will be issued to participants at the conclusion of the competition. Design reports shall not be used for scoring criteria. Important criteria such as legitimacy of design, validity of calculations, and overall project feasibility are discussed among the judges during the discussion period and factor into final scoring.

AWARDS:

WEF Competition Categories: The winning teams from each WEF category will receive a stipend to compete at the WEFTEC student design competition scheduled for September 27th, 2026, in New Orleans, Louisiana. Stipends for travel and lodging expenses to New Orleans may vary depending on the student team's respective WEF Member Association (MA). The winning teams will also have their designs featured in a future Central States Water Magazine issue.

Prizes for the winning teams at the national WEFTEC competition vary from year to year. Monetary awards provided by WEF for the top 4 design teams of each category are typically as follows: 1st place \$2,500, 2nd place \$1,500, 3rd place \$1,000, 4th place \$750.

Global Water Stewardship Category: The winning team from the Global Water Stewardship category will receive a travel and lodging stipend of up to \$1,000/student, for up to four students, to accompany GWS members on an upcoming GWS service trip to Costa Rica. Due to travel logistic concerns, a winning team may only send up to six (6) students on the GWS service trip to Costa Rica.

CAREER FAIR: A career fair will be held on the day of the design competition for any students who are interested in making connections with reputable consulting firms and vendors across the Midwest. The career fair typically occurs after all presentations are completed while students wait for judges to determine the category winners. More information will be shared closer to the competition.

ARRANGEMENTS: Many teams may wish to stay overnight the night before or after the competition. CSWEA shall provide a stipend in the amount of \$500 per team for lodging and travel expenses to assist student teams from Illinois, Wisconsin, and Minnesota Universities to present at the Midwest Student Design Competition in April. Funding may also be provided to student teams who fall outside of the States listed above, pending discussions between CSWEA and applicable student teams and their respective WEF Member Association. Teams are asked to manage their own budgets and provide receipts for reimbursement. If teams need assistance in making arrangements, please contact MSDC Co-Chairs.

FOR ADDITIONAL INFORMATION, CONTACT:

Joe Lapastora – CSWEA Midwest Student Design Competition Co-Chair
Email: lapastora@nmwrd.org

OR

Emma Forthaus – CSWEA Midwest Student Design Competition Co-Chair
Email: eforthaus@msa-ps.com