



Operations Forum

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Water Environment Federation

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4500 Years and Holding

Have Collection Systems Really Changed?

A Double Take For *California*

A Successful Operations Challenge Spreads the Wealth of Good Performances

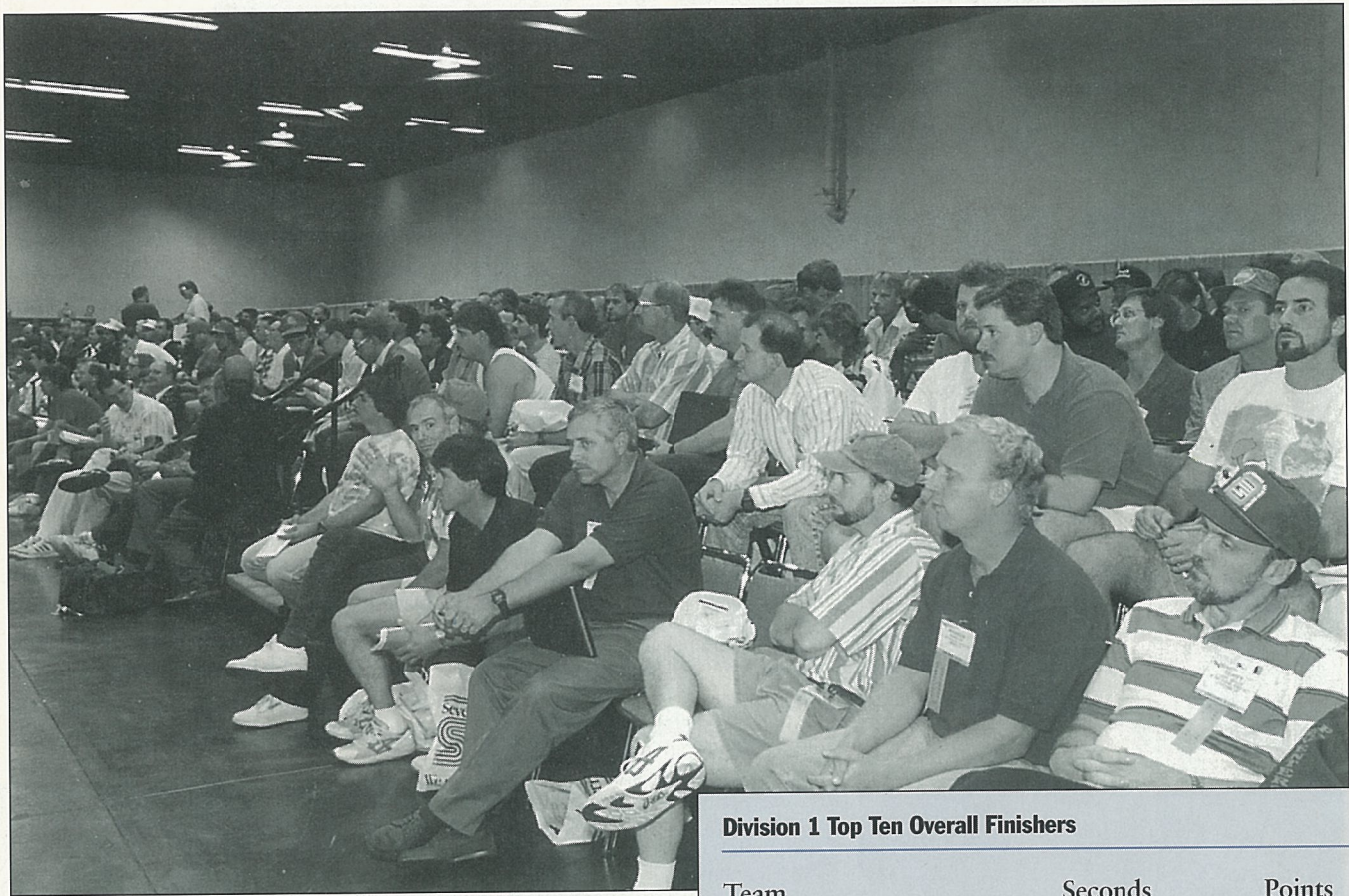
A pair of champion teams emerged this year. In fact, twice as many teams won in every event. Despite some problems with scoring, the

creation of two divisions and the efforts and expertise of everyone involved made this year's Challenge one of the smoothest. • In the past 5 years, a common concern of Challenge teams has been the domination of some teams.

Large municipalities with heavily funded teams have always competed against teams from smaller organizations. In some cases, the members of the “smaller” teams have met for the first time the day before the competition. •

This past year, suggestions for a solution were solicited from team members, committee members, and other WEF members. Ideas for creating divisions based on the amount of money spent by a team for training, the size of the facility in which the team members work, or the number of years of experience in the





The pre-competition meeting was the last chance for teams to clarify requirements for all Challenge events.

Division 1 Top Ten Overall Finishers

Team	Seconds	Points
CA-LA Wrecking Crew	2285.36	452.2
FL-Reclaimers	2466.81	367.0
AR-Sludge Hawgs	2435.78	356.6
VA-Pink and Black	2636.99	355.1
VA-Untouchables	3138.58	343.0
VA-Tornados	2708.87	333.2
GA-SWAT	2847.02	315.7
NEng.-Green Mt. Boys	2682.60	312.9
NY-CAMO Pioneers	3203.76	279.9
PA-Precision Express	2867.20	279.6



Event organizers prepared the collection systems apparatus for competition.

field were received. However, any of these criteria would be difficult to verify or apply.

Two divisions were ultimately created, appropriately called Division 1 and Division 2. Division 1 consists of any returning team (that is, any team with at least two members who competed in the previous year's Challenge) that placed in the top ten in the overall competition and/or the top five in any given event, and any team that placed in Division 2. Any returning Division 2 team that places in the top five overall or in the top three in

any given event will automatically move to Division 1.

All other competitors would com-

pete in Division 2. However, any Division 2 team can move up to Division 1 if it desires. At least 10 teams are nec-

essary to have a Division 2. All teams compete head-to-head, with no differences in events or scoring.

This year, 15 teams competed in Division 1, and 20 competed in Division 2.

The Events

There were no significant changes to the events, which were as follows:

Collection system. Teams had to cut out and repair a simulated break in 8-in. PVC pipe.

Process control. Teams had to solve several problems determined in a pre-competition meeting. Problems could involve industrial pretreatment, activated sludge, or anaerobic digestion.

Safety. Teams had to rig a hoist over a manhole, enter the manhole and pull out a mannequin, and perform CPR, all while using proper



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safety procedures. The teams also had to check for gas levels.

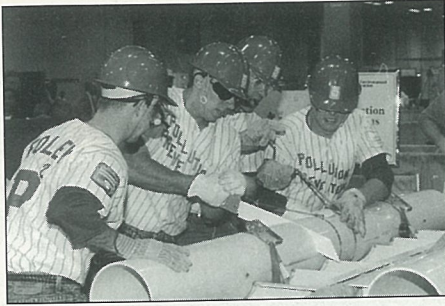
Laboratory. Teams had to perform four of ten laboratory procedures determined during a pre-competition meeting.

Pump maintenance. Teams had to maintain a pump, which included replacing the packing, removing the stator, checking the rotor for wear, and replacing the drive belts.

Presentation of Scores

Every year, the Challenge provides its organizers with lessons they can use to improve the Challenge the next year. This year was no different.

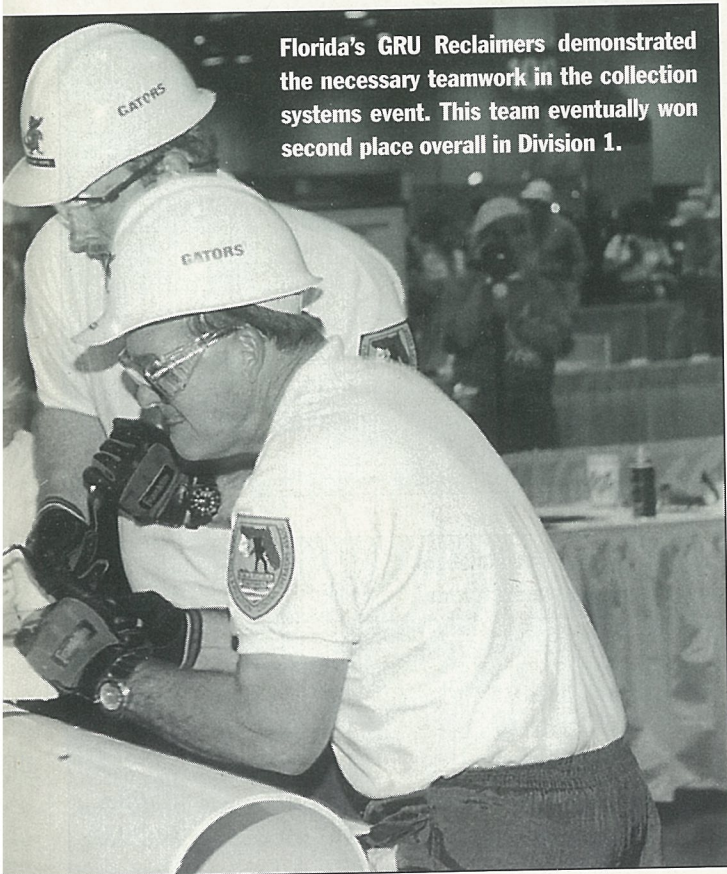
The points system is based on a range of 0 to 100. However, some of the spreadsheet files used this year mis-



Right: All team members must participate concurrently in the laboratory event. While the OMI Sludge Hawks finished 6th in this event, they took 3rd place overall in Division 1.



Florida's GRU Reclaimers demonstrated the necessary teamwork in the collection systems event. This team eventually won second place overall in Division 1.



Division 1 Top Five Finishers Collection System Event

Team	Seconds	Points
CA-LA Wrecking Crew	113.18	100.0
FL-Reclaimers	129.75	91.0
PA-Precision Express	133.75	88.9
NY-Mean Machine	138.00	86.6
NEng.-Green Mt. Boys	151.31	79.4

Division 1 Top Five Finishers Laboratory Event

Team	Seconds	Points
VA-Untouchables	474.47	100.0
CA-LA Wrecking Crew	521.63	87.3
NEng.-Green Mt. Boys	524.24	86.6
FL-Reclaimers	545.61	80.9
KY/TN-Thoroughbreds	592.01	68.4

Division 1 Top Five Finishers Process Control Event

Team	Seconds	Points
AR-Sludge Hawks	781.00	100.0
NEng.-Synergetics	787.00	99.6
FL-Reclaimers	832.00	96.2
GA-SWAT	925.00	89.2
NEng.-Green Mt. Boys	999.00	83.7