The 2019 Intelligent Water Challenge: Judging Criteria
An Opportunity for Vendors, Civic Hackers, and Students

Today’s water industry operates complex treatment, collection, and distribution systems to protect public and ecological health. These systems are increasingly instrumented to monitor key process indicators and other parameters to facilitate operations. The Water Research Foundation and Water Environment Federation, in collaboration with AWWA, Cleveland Water Alliance, ISA, SWAN, The Water Council, and WaterTAP, is holding the Intelligent Water Challenge to demonstrate the value to utilities of these “intelligent water systems.” The Challenge seeks to foster the adoption of smart water technologies by showcasing the ability of intelligent water systems to effectively leverage data for better decisions.

Solution Goals:
- Demonstrate the value of intelligent water systems
- Leverage data using the best available tools to better understand and make decisions

The Intelligent Water Systems Challenge will work with water utilities around the world to identify individual challenges. Teams will work to address these individual challenges through innovative analytics applied to data from utilities’ intelligent water systems. Some utilities may have capacity and interest to participate directly on teams, while other utilities may limit their involvement to furnishing a problem statement and relevant data. The Challenge will therefore distinguish between two types of solvers:

- **Regular teams** will select a Challenge problem statement provided by a utility and develop and implement a solution approach with minimal interaction with the utility. Multiple regular teams can select the same challenge and independently implement a solution.

- **Partnered teams** have one or more members from a utility active on the team. They will work with the other team members directly to define a problem statement, plan an approach, and implement a solution based on datasets provided by that utility.

The two types of teams will be judged independently according to the criteria shown in the Judging Sheet on the next page.
| TEAM NAME |  (team name) |
| JUDGE |  (judge name) |
| SCORE |  out of 140 |

### TEAM
1. **Team** includes necessary skills and has appropriate utility input representation.  

\[ \text{Raw (0-10) x Weight = Score} \]

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| 2. **Problem Statement** that shows understanding of how analytics can address utilities' challenges in utilities' terms.  

| 3. **Characterization of the Intelligent Water System** by describing the existing system or its salient parts.  

| 4. **Plan** that lays out a realistic timeline and approach for achieving the intended solution.  

### IMPLEMENT
5. **Data** streams are clearly identified and QA/QC appropriately discussed.  

| 6. **Analysis & Interpretation** deliver results that clearly support the intended solution.  

| 7. **Communication & Use** provide actionable results supporting decisions.  

| 8. **The Solution** meets utility expectations using appropriate tools.  

### JUDGE'S IMPRESSIONS
9. **Recognition** of alignment with IWS Challenge goals, scalability and sustainability, lessons learned, and more.  

| COMMENTS |

Intelligent Water Systems Challenge Judging Sheet