**2013 ASCE PACIFIC SOUTH WEST CONFERENCE**  
**Concrete Bowling Competition**  

**EVENT DESCRIPTION**  
In this event schools will design and construct a concrete bowling ball that is durable, practical, and aesthetically appealing, and to use it in competition against other schools.

**PARTICIPANTS**  
- Each school may enter only one team.  
- Each team must have a minimum of 2 members and a maximum of 5 members.  
- Each team member must be a registered participant of PSWC 2013.  
- Each team member must have at least one male and one female.

**DESIGN REQUIREMENTS**  
- The bowling ball must be made of concrete. No resins or epoxies may be used.  
- The mix design is left up to each individual school. A mix table must be filled out and submitted at the beginning of the competition.  
- Reinforcement of any type is at the discretion of each school; however reinforcement material shall not exceed ¼” in thickness. Additionally, no reinforcement material should be exposed at the time of pre-competition measurements.  
- The bowling ball must be spherical (left to judges’ discretion). The diameter of the bowling ball must be no less than eight inches (8”) and no greater than ten inches (10”).  
- The bowling ball must weigh no more than 16 pounds.  
- The ball must have been constructed after PSWC 2012.

**COMPETITION**  
- A team will bowl five frames combined, with each member bowling at least one frame.  
- A damaged bowling ball may be played so long as it can perform in the competition (i.e. roll the distance of the alley). If a ball is damaged to the point where it can no longer perform, teams will receive the game score they had acquired up the moment of demise for the ball.  
- If a contestant starts a frame, they must finish it.
SCORING
Each team will be judged on the following categories, out of a total of 100 points.

- **Design Requirements (20 points)**
  - Teams that meet all of the above design requirements shall receive full points in this category.

- **Creativity of the Mix Design (10 points)**
  - Judges will score schools based on their creativity and ingenuity.

- **Durability (20 points)**
  - A team’s bowling ball shall be weighed before and after competition.
  - If the ball loses less than 5% of its original weight, teams shall receive full points in this category.

- **Aesthetics (20 points)**
  - Aesthetics will be judged prior to the competition, with specifics left to the judges’ discretion.

- **Bowling Competition (30 points)**
  - Standard bowling rules apply.
  - Each team will have bowled 5 frames at the end of the competition. An extra bowl is allowed in the case of a spare on the last frame; two in the case of a strike.
  - The game will be played on grass. Standard bowling pins will be used. The lanes will be 40’ long.