BMW Group DesignworksUSA

For Release:

November 20, 2013

**Endless Creativity: BMW Group DesignworksUSA submits two entries to** 

2013 LA Auto Show Design Challenge inspired by nature

**November 20, 2013, Los Angeles ...**BMW Group DesignworksUSA's endless

creativity produced two entries for the LA Auto Show Design Challenge with a theme of

Biomimicry and Mobility in 2025. The first entry entitled BioMINIcry was inspired by

underwater biomimicry including swarm intelligence, deep sea creatures, and jelly fish.

The design team explored using water as a commuting alternative to help solve LA's

daily traffic congestion. The second entry investigated how nature dealt with extreme

environmental conditions to create the ultimate exploratory device based on inspiration

from specific self-sustaining species.

"The Los Angeles Auto Show Design Challenge is a great platform of experimentation

for our creative teams," said Laurenz Schaffer, President, BMW Group DesignworksUSA.

"This year's theme of Biomimicry fascinates us thanks to nature's ability to evolve and

intelligently adapt. We can learn from nature to think in a truly sustainable way when

solving future mobility challenges through creativity and design."

BMW Group DesignworksUSA

2201 Corporate Center Drive Newbury Park, CA 91320

> Telephone 805.499.9590

designworksusa.com

**BioMINIcry** 

BioMINIcry rediscovers the lost L.A. Rivers to create a new transportation network. The

vehicles used in this new transportation network or L.A. Subway have various clever

features.

The vehicles are propelled using bacteria and an electromechanical reaction between the freshwater and saltwater. The headlights are both iconic and functional serving as water intake valves. For energy storage, freshwater and saltwater are collected from the headlights and then stored in the side pods. To create a more efficient swimming motion, an electroreceptor logo detects MINI subs and assists with autonomous swimming. Additionally, a control flap at the bottom of the vehicle generates nimble maneuvering. Lastly, small robots smartly hidden away in the side pods clean, shine the surfaces, and feed off the algae.

## S.E.E.D.

Because of extreme conditions unsuitable to human expedition, 90% of the earth mostly the deep ocean and mountains are unexplored. This fact inspired the design team to create a device capable of travelling into Earth's most unknown territories in hopes of gaining more knowledge. The challenge was to create a vehicle that could not only survive the extreme conditions but do so in an efficient manner. Self-sustainability is necessary in these extreme environments due to the scarcity of resources. The team drew inspiration from specific species with expertise in self-sustainability.

The main concept behind the vehicle comes from plant seeds. Using the maple seed as the primary inspiration, the team wanted to capture how nature's elements used gravity and wind for mobility rather than self generated power.

**Jumping:** Inspired by the ballistic seed, the vehicle captures solar energy to catapult into the air.

**Gliding:** Once the vehicle is in the air and gliding down to its destination, it captures the spinning rotational energy to use for its next jump.

**Swinging:** In tight areas such as tunnels, it releases bioluminescent light bombs similar to sea worms to illuminate the surrounding areas. Flexible arms and tails are used to navigate.

**Protection:** In times of danger, the wing is split into five smaller strands where a web is released to create a spherical protection bubble around the vehicle.

**Walking:** The smaller two arms also generate webs to create a large surface area for walking on water and hard surfaces.

**Swimming:** In water environments, the two arms act as mini propellers, while the wing swerves to mimic a swimming shark gesture for maximum underwater mobility.

## **About BMW Group DesignworksUSA**

BMW Group DesignworksUSA is a creative consultancy that's been driving innovation for forty years. Acquired by BMW Group in 1995, DesignworksUSA enables its parent company as well as internationally-renowned clients outside the automotive industry to grow their businesses through a portfolio of creative consulting services. With clients including Singapore Airlines, Coca Cola, Dassault Aviation, Embraer, John Deere, HEAD, HP, Microsoft, Bay Area Rapid Transit (BART), Siemens, Intermarine, and Varian Medical Systems, DesignworksUSA is deeply immersed in a broad cross-section of industries. Combining cross-fertilized knowledge with strategic long-term perspectives and global context provided by studios in Los Angeles, Munich, and Shanghai, DesignworksUSA draws upon its unique and vibrant resources to create the future.

designworksusa.com

Contact:

Jackie Jones, Manager, Marketing & Communications BMW Group DesignworksUSA Tel.: (805) 376-6253, Fax: (805) 499-9650 E-Mail: jackie.jones@designworksusa.com

# # #