

## 2016 GREEN GENERATION–OVERVIEW

prepared by

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**DISCLAIMER** - This presentation was prepared using draft rules. There may be some changes in the final copy of the rules. The rules which will be in your Coaches Manual and Student Manuals will be the official rules.

- **BE SURE TO CHECK THE 2016 EVENT RULES** for EVENT PARAMETERS.

### TRAINING MATERIALS:

- **Training Power Point** presents an overview of material in the training handout
- **Training Handouts** presents introductory topic content information for the event  
This is a general training handout – there are also special handouts for each part of the competition including separate handouts for Freshwater and Estuary Ecology
- **Sample Tournament** has sample problems with key
- **Event Supervisor Guide** has event preparation tips, setup needs and scoring tips
- **Internet Resource & Training Materials** are available on the Science Olympiad website at [www.soinc.org](http://www.soinc.org) under Event Information.
- **A Biology-Earth Science CD, a Green Generations CD (updated 2016)** and the **Division B and Division C Test Packets** are available from SO store at [www.soinc.org](http://www.soinc.org)

### THE COMPETITION:

**Green Generation** is designed for a two year rotation – the first year (**2015**) covered aquatic issues, air quality issues and climate change while the second year (**2016**) will cover terrestrial issues and population growth issues. **TRAINING HANDOUTS ARE AVAILABLE FOR EACH SECTION**

#### **a. Part 1: Review of the General Principles of Ecology**

- i. General Principles of Ecology - food webs and trophic pyramids, nutrient cycling, community interactions, population dynamics, species diversity and indicator species
- ii. Overview of Terrestrial Environments – forests, grasslands, deserts, tundra

#### **b. Part 2: Problems resulting from human impacts on the quality of our environment**

- i. Terrestrial Environment Issues – Desertification, Deforestation, Soil pollution, Waste Disposal, Mining
- ii. Population Growth Issues – Habitat Destruction, Farming Practices, Fertilizers & Pesticides

#### **c. Part 3: Solutions to reversing/reducing human impacts that harm our environment**

- ii. Legislation and Economic Opportunity for Solving Problems (Div. C)
- iii. Bioremediation Strategies – Terrestrial Environments and Population Growth Issues
- iv. Sustainability Strategies – Environmental Stewardship of Terrestrial Ecosystems
- v. Nonrenewable, Renewable, and Alternate Energy Sources
- vii. Waste Management