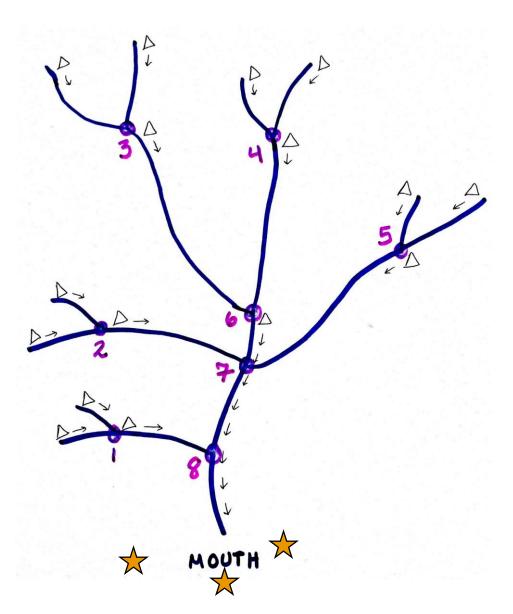
# Model Role List and Set-Up:

Farm nutrient runoff: Teacher and/or responsible student

Streams and tributaries: 16 students (minimum)

Water quality monitoring stations: Depending on the number of students in your class, this could either be the role of the teacher, or you could have between 1-5 students acting as stations

Gulf of Mexico aquatic organisms: As many or few as needed to include the remaining students in the class (0+)



Stream junction where nutrients will be counted and recorded by water quality monitors



## From Farms to Phytoplankton

## Teacher's Guide

### A note about the Aquatic Organism Information Table on the Student Reference Sheet:

This table lists information about some of the species you might find living in the Gulf of Mexico. The oxygen requirements of any one species can vary, and the *minimum* oxygen requirements of an organism is actually a difficult number to pin down. Oxygen needs can vary for an organism depending on its physical state and the temperature of the water it is living in.

#### Information in Aquatic Organism Table from:

A Picture Guide to Shelf Invertebrates from the Northern Gulf of Mexico

FishBase.org

**Encyclopedia of Life** 

Habitat Suitability Index Models: Southern and Gulf Flounder

http://ian.umces.edu/pdfs/ian\_newsletter\_170.pdf

