Student Handout #1

**Gasping for Breath in Hood Canal: Exploring the Dissolved Oxygen Crisis**

**Introduction**: The following multi‐step activity asks you to gather with a group of classmates and work collaboratively to develop a better understanding of the many factors contributing to the dissolved oxygen rises in Hood Canal.

**Part 1A: Getting Started**

With your instructor, or on your own computer, go thttp://wdfw.wa.gov/hab/hood\_canal\_oxygen.htm. On this page you’ll find a five minute video clip from the Washington Department of Fish and Wildlife (WDFW) documenting the dramatic fish kill that occurred during the summer of 2006. Watch the video and then discuss the following questions with your group. One person from your group should act as the note‐taker and capture the thoughts of the group.

A.) Summarize the observations made by the WDFW diver:

B.) What questions do you have about what’s occurring in Hood Canal?

**Part 1B: Physical Factors**‐ Find Hood Canal on the map.

What unique physical features of Hood Canal might make it especially prone to low oxygen events?



**Part 1C: Biological and Chemical Factors**

**A.** With your group, brainstorm a list of biological and/or chemical factors that might affect the levels of dissolved oxygen in Hood Canal. Consider, for example, how the rates of photosynthesis and respiration might affect dissolved oxygen, and what types of factors might affect the rates of these two processes.

**B.** Of the factors you identify above, which do you think is most significant in determining dissolved oxygen levels and why?

**Part 1D: Learning More**. Your instructor will provide you with a summary of current research in Hood Canal. Read through this information and answer the questions provided. Be ready to discuss your answers and the findings of the Hood Canal Dissolved Oxygen Program during your next class session.