NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Dragonfly Pond-Mrs. Weimer

**BACKGROUND:** Wetland habitats change as a result of land- use practices. Ideally we seek a balance in providing for the needs of people and wildlife. However, human needs sometimes have negative impacts on wildlife habitat. Wetlands in particular are often seen as obstacles to development or wastelands which need to be improved, filled or drained so that they can be put to " good" use. Homeowners and other people sometimes want to replace or fill wet or flooded areas so that grass can be cut or grown better. This innocent act may replace the only breeding habitat for wetland species. Natural wetland ecosystems are both in a dynamic balance and self-regulating but few wetlands today are in a natural state. Changes in surrounding land-use have impacted many wetlands . Pollutants or fertilizers are mobile and are carried in groundwater or run-off to be deposited in wetlands and held there when taken up by plants . The loss of wetlands is even more serious for wildlife. It will be a challenge for landowners , planners and homeowners to find ways that they can live with wildlife and we can continue to have development for towns, industries and farms.

**MAP:** On your large piece of paper, you must have the following:

 **1. Irregular shaped pond encompassing ¼ of the paper with an inflow and outflow creek “dragonfly creek”**

 **2. An adjacent wetlands marsh with cattails – 1-2 inches from outside of dragonfly pond**

 **3. Stores**

 **4. Restaurants**

 **5. Chemical factory**

 **6. Gas station**

 **7. 5-10 houses**

 **8. Farm with cornfield (1/4 of your map)**

 **9. Pastureland (1/8)**

 **10. Fire hall**

 **11. Woodlot**

 **12. School**

 **13. Soccer fields**

 **14. Park**

 **15. Forest**

 **16. Undisturbed grassland**

1. You must have all the things on the paper

2. You are graded on the drawing and also on the following:

 **a. 5 Benefits of a wetlands**

 **b. 5 impacts of pollution on the wetlands**

 **c. 5 amphibians (with pictures and labels)**

 **d. 5 reptiles (with pictures and labels)**

 **e. 5 fish (with pictures and labels)**

 **f. 5 macros (with pictures and labels)**

 **g. Research components:**

**1. Management of harmful algal blooms is best accomplished in large bodies of water by which procedure?**

**2. Trees that grow adjacent to a body of water such as streams are called riparian buffers. These areas provide a variety of benefits to both aquatic and upland wildlife. Which of the benefits of riparian buffers is a key to fish surviving and breeding in a stream system?**

**3. Some farmers have trouble with too much water, leading to puddling and difficulty working their fields in the spring. A solution to this is drainage pipe. What are some of the ways a farmer would change their farming practices after the drainage pipe was installed?**