

## ENVIRONMENTAL SCIENCE

### *Field Work Results Rubric*

#### ***First, a review of when we re presenting:***

May 7, 2002 from 4 PM -7 PM. A bus will take us to the Urban Ecology Institute offices in Newton, leaving school around 2 PM and returning around 7:30.

June 3, 2002 from 7-8 PM (I think). This meeting will be in Charlestown for the Charlestown Waterfront Coalition, and I will give anyone a ride home who needs one.

#### ***Next, a review of what Ivey asked for:***

1. Landscaping recommendations to attract birds and butterflies (and people) to the park area
2. Water quality (DO, pH, salinity, nitrate and fecal coliform) for the Little Mystic Canal as it relates to tidal levels
3. A comparison (probably in the form of a graph with a write-up) between water quality of the Little Mystic, Mystic River and Boston Harbor at the Navy Yard

#### ***Finally, what you'll be required to do for the project (This is worth 50% of Term 4):***

AS A CLASS (you will each get the class grade, weighted according to your participation):

Prepare a colorful, accurate display which includes all graphs and write-ups from individual water data (25 points)

Prepare a colorful, accurate display that includes habitat analysis of all birds from our field site, and recommendations for landscaping the site to attract more birds and/or butterflies. (This could include tree planting, working with Charlestown Sprouts, building birdhouses/feeders, benches, or other improvements.) (25 points)

Prepare a written report, directed towards the Charlestown Waterfront Coalition, listing all of our recommendations for the site. (50 points) Report should include:

- o Title page
- o Names of all contributing authors
- o One paragraph explaining how we did our bird research (including possible data problems)
- o One paragraph summarizing results of bird research
- o One paragraph summarizing results of library research on attracting birds/butterflies
- o One paragraph listing recommendations for attracting birds/butterflies and generally improving the area
- o One paragraph explaining how we did our water testing (including possible data problems)
- o One paragraph summarizing results of water testing
- o One paragraph listing recommendations for further testing and/or remediation, including a list of contact organizations
- o Bibliography

#### INDIVIDUALLY

Create at least one graph related to water quality, and a different one from anyone else. (20 points total) Graph needs to include

Color

Title

Appropriate type of graph for data (bar, line, etc.)

X and Y scales, labelled, appropriate scale

Tide levels

Professional appearance and accurate data

Create a one-paragraph explanation/analysis explaining what your graph means as far as general water quality, as well as specifically for swimming or fishing (20 points)

Prepare a one-paragraph write-up, with color illustration, explaining the habitat requirements of one bird on our site and what this means for site health (15 points)

Prepare a one-paragraph write-up, with color illustration, about one tree/plant species that could attract birds to the area. Describe the tree species, which birds it could attract, and how you know. (15 points)

Prepare, and deliver twice, a 3-minute presentation based on your graph and bird results. Presentation should include: (30 points)

Your water health conclusions, based on your data

Clearly stated evidence supporting your conclusions

Professional speech and appearance (correct grammar, eye contact, good posture, looking comfortable, etc.)

Accurate, complete responses to audience questions

Recommendations for future research or actions to take