

Knox County Adopt-A-Watershed Investigative Summary Reporting Form

Watershed: _____ Teacher: _____ Course: _____ Block/Period: _____	Date: _____ Field Investigators (include first/last names & any class/investigative team name): _____ _____
--	--

DATA SUMMARY

Using the results from your watershed investigations, complete the following table. (If multiple rounds of chemical or benthic assessments were conducted through the semester/year by your investigative team, record these on a separate form and evaluate for any trends over time. Placing data in a graphic format (bar charts, etc) will help you identify notable trends.)

<p>Dominant Land Uses (<i>Select top three</i>)</p> <input type="checkbox"/> Single Family Residential <input type="checkbox"/> Multifamily Residential <input type="checkbox"/> Commercial/Office <input type="checkbox"/> Industrial/Manufacturing <input type="checkbox"/> Agriculture/Forestry/Vacant Land <input type="checkbox"/> Public Lands/Parks <p>USDA Visual Stream Assessment</p> <input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <p>Index of Biotic Integrity</p> <input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/> Very Poor <input type="checkbox"/> No Fish <p>Benthic Macroinvertebrate Assessment</p> <input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <p><i>E. coli</i></p> <input type="checkbox"/> In normal range for surface water body contact (less than 200 colonies/100 ml) <input type="checkbox"/> Out of normal range	<p>Chemical Tests</p> <p><i>pH</i></p> <input type="checkbox"/> In normal range (6 – 9) <input type="checkbox"/> Out of normal range <p><i>Dissolved Oxygen</i></p> <input type="checkbox"/> In normal range (greater than 5 ppm) <input type="checkbox"/> Out of normal range <p><i>Biological Oxygen Demand</i></p> <input type="checkbox"/> In normal range (Less than 5) <input type="checkbox"/> Out of normal range <p><i>Nitrate</i></p> <input type="checkbox"/> In normal range (less than 90 mg/l) <input type="checkbox"/> Out of normal range <p><i>Nitrite</i></p> <input type="checkbox"/> In normal range (less than 5 mg/l) <input type="checkbox"/> Out of normal range <p><i>Orthophosphate</i></p> <input type="checkbox"/> In normal range (less than 0.05 mg/l) <input type="checkbox"/> Out of normal range <p><i>Total Chlorine</i></p> <input type="checkbox"/> In normal range (less than 0.01 mg/l) <input type="checkbox"/> Out of normal range <p><i>Water Temperature</i></p> <input type="checkbox"/> In normal range (less than 30.5° C) <input type="checkbox"/> Out of normal range
--	---

Our Interpretation

Based on the results of your watershed investigation (front page summary) and research, describe your overall impression of the health of your watershed/stream. Consider in your interpretation the land uses you observed in your watershed and how they might be related to stream assessment results.

Other Possible Considerations for Your Interpretation

Stream Uses

The Tennessee Department of Conservation (TDEC) sets certain goals (uses) for each stream. At minimum, each should be "fishable and swimmable" according to a goal set by Congress. Based on your investigative results, is your stream healthy enough for the following uses? Why or why not?

- Recreation:** Would you swim or wade in shorts in this stream?
- Fish and Aquatic Life:** Is it healthy enough to support a diversity of aquatic life?
- Livestock Watering and Wildlife:** Is it clean enough to allow wildlife or livestock to drink from it?
- Domestic Water Supply:** Would you want your drinking water coming from this stream?
- Industrial Water Supply:** Could it be used by local industry in their industrial processes (example: as a cooling agent)?
- Irrigation:** Is it clean enough to irrigate a family garden or crops?

Possible Solutions to Stream Problems

Throughout the semester/year you have learned about ways to improve the health of your stream. What would you recommend that could be done to address any problems you've observed related to your stream? What personally could you do to improve it?