



Land Cover Changes in the Buffalo River Watershed

Time: 1-2 40-minute class periods

Grades: Middle and High School

1. Choose one sampling site set of “Land Cover Changes in the Buffalo River Watershed Images.” Print a set for students to share and display them to the whole class on a screen. Print copies of the following worksheet for each student.
2. **Discuss as a class: What is covering the land in these photos?** *Examples include water, vegetation, pavement, residential buildings, commercial buildings, etc.*
 - **Note:** In color infrared (CIR), or false color images, the use of near infrared causes vegetation to appear distinctly red to magenta.
3. **Choose 4-6 land cover types based on their images.** As a class, assign each land cover a color or a symbol.
4. **Have students draw a 1” x 1” grid on over the images.** For each square, decide which land cover takes up the most land and color or number the square with the corresponding land cover type.
5. **How has the land cover changed over time? What other changes do you notice?**
6. **Discuss as a class:**
 - How could these changes affect water quality?
 - What changes could we make to improve water quality at this site?



A DAY IN THE LIFE OF THE
BUFFALO RIVER

Name: _____

Year of Photo 1:		
Land Cover	Number, symbol, or color	Fraction <i>For example:</i> (<u># of road squares</u> / # of total squares)

Year of Photo 2:		
Land Cover	Number, symbol, or color	Fraction <i>For example:</i> (<u># of road squares</u> / # of total squares)

How has the land cover changed over time? What other changes do you notice?
