



## GUIDING PRINCIPLES FOR WATERSHED DISCOVERY

Each component of the Listening to the River Project that involves teams of youth and volunteer guides working on science and technology investigations is based on these principles:

1. Youth and volunteer guides choose to be involved because they have a highly personalized interest;
2. Each experience links teens to active science investigations with a two-fold purpose:
  - o To observe and capture a comprehensive picture of the watershed through observation and direct experience;
  - o To investigate the watershed environment through intentional focus on relevant science fields (i.e. hydrology, ornithology, geology, engineering, etc.).
3. Multiple pathways and formats are used to engage the participants;
4. The process of exploration is inquiry-based and hands-on;
5. Youth and guides/content specialists meet before going into the field for any necessary training on equipment, to review goals of the field work, and to get a sense of the youths' current level of understanding and skill in the science and/or technology focus;
6. Youth work in pairs;
7. Field time includes a large enough block to allow for flexibility;
8. Field experiences are followed by classroom, lab and production time as needed;
9. Reflection time is built in (via discussions, field journals, follow up on-line chats, etc)
10. Career/school opportunities in science and technology are discussed where appropriate.

The overall purpose of the experiences is to use technology to record perceptions, to challenge team members' observational skills and the sensitivity of their perceptions, and to meaningfully interpret these perceptions/observations for others.

