

Title: The Application of Community Based Participatory Environmental Research (CBPR) to the Study of the Quality of a Major Regional Water Source.

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The objectives of the ARSP are to engage wider community participation of the communities living and working in the Allegheny River watershed to raise awareness of related water quality issues for the purpose of developing research questions, determine sites for sampling sites, as well as collect the sample of fish, water and sediment needed for analysis of metal and estrogenic active substances in the Allegheny River above Pittsburgh, PA. Other objectives were to build a network of collaborators for sustainability of the project, and create a more synergistic network for development of future research projects based on community needs. A variety of techniques were used to achieve the objectives of this study including a systems approach. A diagram of interaction between a number of diverse groups and organizations was created and analyzed. This formed the basis for extensive community organizing consisting of: three town hall meetings, numerous presentations on the ARSP to community organizations, schools, and various groups as well as radio, television and print media. The internet was used for sharing information with the community as well as providing an expeditious means for volunteer recruitment. Pollution narrative statements gathered community needs and concerns related to environmental problems. Window walking, participant observation, focus groups and one-on-one interviews were employed in order to better understand the key issues involved. One result of employing this variety of CBPR techniques was to create one of the largest community based environmental studies in Southwestern Pennsylvania. Four major sites were selected for water, sediment, and fish sampling based on community input gathered from pollution narratives. Fifty to approximately one hundred community volunteers attended the four community fishing days at each of the collection sites. Educations as well as informational brochures relating to a variety of environmental issues (air, water and emerging contaminants) were offered to community volunteers as well as passerbies at each of the community fishing days. Registered community volunteers permitted ongoing dialogue with researchers resulting in a feedback loop affecting study variables and study parameters. The amount of community information gathered resulted in important knowledge about how to communicate results as well as inform future initiatives. The size, types and number of fish collected are more highly indicative of fish generally caught by people living and recreating on this river. There are numerous benefits and challenges to this type of environmental study. The major benefit from this study is the high degree of collaboration and knowledge gained from the community allowing for targeted communication of results as well as ongoing information sharing.