Strengthening a Neighborhood Through Stream Restoration

Water Hood

Sustainable design advocates argue that the greening of inner-city landscapes (through projects like community gardening, reclaiming streams and planting and maintaining trees) can strengthen urban ecosystems and connect them better to human communities. But in many communities, ecological concerns take a back seat to issues of employment, crime, safety and respect for cultural diversity. In these places, designers and environmental advocates must develop strategies that address social, physical and economic conditions as part of the ethic of sustainability.

The Courtyard Creek project in Oakland uses stream restoration as a tool for strengthening a neighborhood. The project involves rehabilitating a five-block-long stretch of the creek and an abandoned streetcar right-of-way and melding them into a park. The park will provide a better physical link between the community and the creek, help residents (who are participating in planning and implementing the project) value their environment and validate cultural and ethnic identity (by promoting places that have multiple uses and interpretations).

The landscape features both riparian and street spaces that can be used by residents of all ages. The design embraces the idiosyncratic patterns and practices of the diverse community while using state-of-the-art restoration techniques to repair the creek and revitalize its damaged slopes. Each intervention is multi-layered, teaching an awareness of place and environment through contact and use. For example, at corner "chillins" or bringing out spots, historical markers will document the old trolley stops while new corner structures will make places for informal group-socializing and feature details for water collection and drainage.

The slope restoration uses plant materials to stabilize stream beds. Techniques include brush layering (staking and layering plant material to build up damaged slopes) and wattling (bundling locally cut willow branches and placing them along stream contours to collect sediment). These techniques provide temporary stability until the creek stabilizes its course.

The slopes are also designed with users in mind, in familiar patterns and allowing opportunities for access and play. Neighborhood residents will constantly be reminded of the presence — and fragility — of the creek.

The success of the project rests on the community's willingness to claim ownership of the new park. A neighborhood organization has evolved into an administrative entity, tracking the project's progress, making sure the community stays involved in decision making and expanding the community's role in civic affairs. It sponsors neighborhood clean ups, tree planting and restoration workshops and block parties.

The park project has also kindled linkages among residents that are giving the neighborhood new strength. Neighbors who worked with each other in the park development process are organizing a community watch program. Police and city officials are a more common sight in the community. Scientific research can help identify restoration strategies that will enable waterways like Courtyard Creek to sustain themselves. But for the neighborhood and city, long-term sustainability depends on people being able to resolve conflicts, see beyond stereotypes, acknowledge a range of values and accept one another. The process of designing, building and managing the Courtyard Creek park has created a framework for this kind of dialogue.