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Ed P. Reyes

Greening the *Concrete* River

by Ed P. Reyes
Los Angeles Council Member and Chair,
Los Angeles River Ad Hoc Committee

*Sun rays dance on the surface.
Gray fish fidget below the sheen.
And us looking like Huckleberry Finns
Tom Sawyers, with stick fishing poles,
As dew drips off low branches
As if it were earth's breast milk.*
from The Concrete River,
by poet Luis Rodriguez

It was the summer of 1968 when I discovered the Los Angeles River. I was 9-years-old when my brother Richard and our Cypress Park neighborhood pals PeeWee, Mikey, Pio and John grabbed our sticks and toy rifles and set out for a day-long adventure. We had learned about "the hole" from PeeWee, the ringleader of the group whose grandfather drove big trucks through Chinatown, along the Los Angeles River.

We climbed down the concrete lip of the Los Angeles River. Here we would sit on sun-scorched rocks and drop fishing lines in "the hole," a deep remainder of sewage flow where tar-colored catfish managed to survive. We were Tom Sawyers on a concrete river. The Los Angeles River was an eyesore and it smelled. But we saw something different. It took a lot of imagination. But we imagined a wonderful river.

More than 35 years later, that river remains a sad and smelly eyesore. The irony is that this body of water which gave life to a major metropolis is dying of neglect — an ecological wasteland.

Today, The City of Los Angeles is faced with a choice. We can choose to dwell on the problem, or we can choose to imagine the possibilities of a wonderful river.

We have the opportunity to transform the river from a dumping ground, paved with concrete in the 1930s, to a thriving greenbelt linking neighborhood parks,

bike trails, homes and businesses. This vision begins with the Los Angeles River Revitalization Master Plan, a 25-50 year blueprint to transform a more than 30-mile stretch of the 51-mile river into a continuous greenbelt linking communities from Canoga Park to Boyle Heights.

The late 1980s brought about a remarkable momentum of environmental and community groups pushing for the restoration of the river. From this interest was born the development of the Los Angeles River Plan in 1992, the creation in June 2002 of the Ad Hoc Committee on the Los Angeles River, which I chair, and the adoption of the City's Los Angeles River Revitalization Master Plan in 2007.

Since then, the City of Los Angeles, led by Mayor Antonio Villaraigosa, the Ad Hoc Committee, the County of Los Angeles, California State Parks, the Santa Monica Mountains Conservancy and other agencies and community groups have made significant headway in this plan.

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40th Anniversary of Michigan's Natural River Act

by Steve Sutton

Michigan citizens are fortunate to be surrounded by more than 36,500 miles of rivers and streams, 12,500 miles of which are classified as cold water trout streams. We are also fortunate that Michigan has many programs focused on the protection and enhancement of those river resources. One such program is the Natural Rivers Program, which is part of the Habitat Management Unit within Fisheries Division, Department of Natural Resources and Environment (DNRE).

The year 2010 marks the 40th anniversary of Michigan's Natural River Act. In the late 1960s, the Department of Natural Resources (DNR) and Michigan legislature recognized that the state's rivers and streams were some of Michigan's most important natural resources. They also recognized the beauty and quality of the state's rivers were fragile and being threatened. In response to the threat, on December 3, 1970, Governor William Milliken signed into law Michigan's Natural River Act. The new law authorized the DNR to develop a system of Natural Rivers in the interest of the people of the state and future generations, for the purpose of preserving and enhancing a variety of river values including; aesthetics, free-flowing condition, ecologic, recreation, boating, historic, water conservation, floodplain, fisheries, and wildlife. Since 1970, 2,091 miles on sixteen rivers or segments of rivers have been designated into Michigan's Natural River System.

Designation and Implementation

The Natural River designation process begins by development of a comprehensive river management plan written by a working committee known as an advisory group. Advisory groups include essentially any group, agency, unit of government, property owner, or citizen with an interest in the process and in protecting the river system being studied. The management plan contains background and baseline



*Frenchman's Creek, tributary to the Upper Manistee, designated in 2003.
Photo: Dan Pearson*

data about the river system being studied, as well as the proposed river segments to be designated and the recommended public and private land development standards.

Once the plan is written and public hearings are held, the DNRE Director has the authority to designate a river as a Natural River. Following designation, administrative rules are written for each river system. The Natural Rivers Program is an effective management tool to protect river resources because of its authorization to utilize basic development standards on both public and private lands affected by designation. Because all lands, public and private, within the Natural River district (400 feet on either side of a designated river) are included in the designation, a seamless corridor of protected land is the result.

It is within the 400 foot-wide Natural River district that all Natural River protection or development standards apply. Development standards within the district include: a required natural vegetation buffer to protect the aesthetics and function of the river system; a minimum lot width and parcel size to control the density of streamside development; and minimum setbacks for all structures from the water's edge to reduce impacts to the river and buffer, as well as maintain, the scenic quality of the river. A septic system

setback from the water's edge is also required to reduce nutrient inputs to the river. Types of uses (residential, commercial, etc.) within the district are also limited or prohibited in order to prevent inappropriate land uses near a designated river.

The Science

When compared to the entire watershed or landscape-scale variables, such as climate, geology, or topography, the relatively narrow zone of influence within the Natural River district will not account for all impacts to a river system that may result from land use changes within a watershed (Zorn and Wiley 2006; Allan 2004). Furthermore,

landscape scale alterations such as urban development or agricultural uses can threaten or influence habitat, water quality, and biota within a river system (Allan 2004; Townsend 2003; Fausch et al. 2002) and may "overwhelm" riparian vegetation (Roth 1996).

However, Gregory et al. (1991) stated, "The importance of riparian zones far exceeds their minor proportion of the land base because of their prominent location within the landscape and the intricate linkages between terrestrial and aquatic ecosystems" (p.545). The riparian area, floodplains, and riparian vegetation have been found to be important for protecting in-stream communities of macroinvertebrates and natural processes, such as providing inputs of organic matter, including dissolved organic carbon in leaf litter (Findlay et al. 2001), controlling the amount of water entering a stream as runoff (Strayer 2003), and reducing instream nutrient concentrations (Baker et al. 2001).

Protecting the riparian area and its vegetation is important to the biological function and stability of river systems by providing bank stabilization through root systems, inputs of large woody debris, in-stream habitat, organic material, stream shading and reduction of stream temperatures, and reducing stormwater runoff and sediment transport (Lammert and Allan

1999; Roth 1996; Osborne and Kovacic 1993; Karr and Schlosser 1978), which in turn, can influence fish communities (Naiman and Latterell 2005). Headwater streams and their riparian areas are considered especially important to protect, as they provide the initial sources of stream energy, water, nutrients, sediment, and organic matter to a river system (Gomi et al. 2002; Vanotte et al. 1980). By protecting riparian vegetation, the scenic, aesthetic, and wildlife habitat values associated with natural riparian corridors are also protected (Lovell and Sullivan 2005). Orth and White (1999) claimed it is essential to understand the relationship between riparian areas and stream habitat and to manage and protect them, because an altered riparian area can negatively impact stream habitat.

In addition to the importance of the riparian area, a Natural River designation protects a river's free flowing condition by prohibiting dams and harmful streambank stabilization projects. Protecting the free flowing condition of a river, or its natural flow regime, can influence the ecologic integrity of the entire river system by affecting water quality and quantity, energy sources, physical habitat, and biotic interactions (Poff et al. 1997).

Local Control Option

Another important aspect of Part 305, Natural Rivers is the ability of local units of government to adopt Natural River zoning standards to become the Program administrators on private lands within their jurisdiction. Partnerships with local units of government are critical to the effectiveness of the Program, as nearly 60% of designated mileage is currently subject to locally administered Natural River zoning. Along with local units of government, the Program relies on many other partners who work close to the resource. Landowners, watershed councils, RC&D Programs, USDA Forest Service, Trout Unlimited chapters, canoe livery owners, and other Department staff to name a few.

On the ground administration of the Program works through a permit process, similar to any local zoning permit. In state-zoned areas, a property owner applies for a state Natural River zoning permit. Program staff review applications for completeness then schedule on-site inspections to verify information and meet with landowners if needed. When the development standards are met, a permit

is issued within a few days. If the development standards cannot be met due to a variety of circumstances, a variance may be requested from the Zoning Review Board (ZRB). The ZRB is a seven member board comprised of representatives from each affected County, Township, NRCS, local citizens and the DNRE.

In a locally zoned area, the Natural River permit review process becomes part of the affected County or Township zoning ordinance, and is administered as any other district within their jurisdiction. Permits are applied for and received at the local level. In locally zoned areas, Natural River staff become involved in review of local ordinance language amendments, comment on variance request, and assist in compliance activities when needed. Locally zoned areas are routinely monitored to ensure uniformed administration within each river system.

Additional Information

Please visit <http://www.michigan.gov/dnr>. Steve Sutton, Natural Rivers Program Manager, can be reached at (517) 241-9049 or Suttons@michigan.gov ♦

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