

Story and Photos By Kathy Andrews

he rhythmic motion of the pump jacks dotting much of southeastern Illinois give evidence of the petroleum riches lying under the earth's surface. At the turn of the century, new technologies and a changing society drove the accelerated harvest of black gold, and oil refineries became the economic foundation for many communities.

By the late 1920s, an innovative process to refine lubricating oil from nearly any type of crude oil was invented at the Indian Refinery in Lawrence County. Operating for nearly 90 years, the 991-acre refinery adjacent to the

Embarras River sits at the edge of Lawrenceville.

Today, remains of the former plant include footprints of the recently dismantled industrial infrastructure, earthen berms enclosing former tank farms and





oil-water separators collecting droplets of oil captured as site runoff. One portion of the refinery, known as Indian Acres, is an area that raises potential concerns for the health of humans and the environment.



Among footprints of the former Indian Refinery exist a diversity of wildlife species.

"Although much of the area is covered by vegetation, acidic sludge, a by-product of the creation of lubricating oil, lies on the surface of the 69-acre parcel," explained Greg Ratliff, Illinois Environmental Protection Agency project manager. "In warm months, the material becomes viscous and creeps down slope—a troublesome problem as much of Indian Acres lies within the floodplain of the Embarrass River. During flood events, this uncontained waste is scoured away and carried downstream."

Flood plain forest persists in portions of the refinery property that are not

Indian Acres received waste material through direct application or dumping. The Natural Resource Damage Assessment is addressing such disposal areas.

known to have been associated with refinery operations, and are located in the 100-year floodplain of the Embarras River. Emergent wetlands and several oxbow ponds are found in these areas as well. Areas of the refinery are utilized for foraging and feeding by waterfowl, colonial waterbirds, songbirds, white-tailed deer, several species of bats, mink, river otter, voles, mice, turtles, snakes, frogs and salamanders.

"Within the Embarras watershed are a number of state and federal species of interest that could be impacted by dis-







Located in the flood plain of the Embarras River, containment of waste material is necessary to prevent impacts to downstream organisms.

charges from the site," U.S. Fish and Wildlife Service project manager Ginger Molitor said. "We want to minimize any impacts on all the natural resources, from the mussels filtering food from within the water column, to the plants drawing from river and groundwater sources and the birds feeding their nestlings fish from the river."

Given the variety of animals present, it is evident the refinery site is not devoid of natural resources; however, the resources may have been, or currently are being, impacted by refinery releases of oil and/or hazardous substances, and are therefore being evaluated through a Natural Resource Damage Assessment.

The Illinois Attorney General and IEPA filed an action against Texaco (Texaco

or updates on the cooperative assessment process visit www. fws.gov/midwest/LawrencevilleNRDA.

merged with Chevron in 2001 and is now a wholly owned subsidiary of Chevron) in federal court, resulting in a Consent Decree in 2001 directing the company to conduct a Remedial Investigation and Feasibility Study. In coordination with this investigation, the state Natural Resource Trustees—IEPA and Department of Natural Resources—and the federal trustee—the U.S. Fish and Wildlife Service—are conducting an NRDA.

"The coordination of these programs allows the sharing of biological data and consideration of response actions and restoration activities necessary for an adequate assessment of environmental damages," said Beth Whetsell, DNR project manager. "The trustees and Chevron are working diligently to evaluate natural resource injuries, determine damages, evaluate various restoration alternatives and develop a strategy for such restoration."

In December 2004, a funding and participation agreement was signed, and Chevron committed to underwrite environmental restoration activities. In late May 2005, the process was presented to the community for input and support, a process that will continue throughout the upcoming years.

"Chevron is committed to being a good neighbor," Mike Ammann, staff environmental scientist for Chevron, said. "It is our desire to work cooperatively with the trustees toward the goal of restoring the natural resources as efficiently and as quickly as possible. We want to make sure the public has every opportunity to be involved so their expectations are met and they see the benefit and restored habitat. And perhaps contribute ideas for an interpretive center and trails."

Knowing what we know now, the day-to-day operation of the Indian Refinery may have been entirely different. But, using advanced technologies, the knowledge we've gained and the strength of the partnership, impacts to the landscape will be undone in a reasonable amount of time—avoiding prolonged years in court and untold legal fees.

What is NRDA?

A Natural Resource Damage
Assessment enables Natural Resource
Trustees to seek natural resource damages arising from injury to, destruction
of, or loss of natural resources resulting
from the release of oil and/or hazardous
substance to the environment. The overall objective of an NRDA is to make the
public whole by restoring, replacing or
acquiring the equivalent of such natural
resources.

Who are Trustees?

Trustees are any federal natural resource management agency designated by the National Oil and Hazardous Substance Pollution Contingency Plan and any state agency designated by the governor.

What is a Cooperative Assessment?

A cooperative assessment is a partnership with industry, government and the public to restore natural resources injured by release of hazardous substances and/or oil. The cooperative assessment process is an opportunity for the responsible parties to work with the trustees in the evaluation of an impacted area and the development of appropriate restoration actions. The objective of a cooperative assessment is to expedite the restoration of injured natural resources and associated services, encourage innovative approaches, reduce assessment costs, strengthen partnerships among stakeholders and provide meaningful public awareness and participation.