



By Jonathan McKnight and Lisa Pelstring

On April 7, 2000, a pipeline running under a quiet tributary to the Patuxent River cracked and began leaking fuel oil into the environment. By the time the leak was discovered, more than 130,000 gallons of viscous, black oil had flowed into and over the pristine marshes of Swanson Creek. Emergency crews from the Potomac Electric Power Company (Pepco) and federal and state agencies worked through the night to contain the oil, but on the following evening a rogue storm of astonishing intensity blasted through the area and forced the oil over, under and through the floating barriers. By Sunday morning, April 8, the freed oil slick had contaminated miles of Patuxent River beaches and marsh, and was moving downstream in a deadly wave that would blacken 40 miles of shoreline.

### The Response

The response to the oil spill at Chalk Point was swift and sure. Officials at the state and federal levels were prepared for such an event, in large part due to an incident that occurred more than a decade earlier and a continent away. After the 1989 Exxon Valdez oil spill decimated wildlife and other natural resources in Alaska, Congress passed the Oil Pollution Act. The comprehensive legislation was designed to not only prevent oil spills, but to also ensure a rapid response when one did occur, and make certain that the responsible party was held accountable for making the public whole for lost resources and services.

In the months that followed the Southern Maryland spill, a massive cleanup ensued, involving thousands of personnel and costing millions of dollars. And as the cleanup progressed, a parallel process began: A Natural Resource Damage Assessment (drolly tagged "NeRDA") was initiated under the Oil Pollution Act by the Maryland Departments of the Environment and Natural Resources, the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Fish and Wildlife Service (USFWS). Throughout the process, these agencies would serve as trustees, acting on the public's behalf to investigate and assess the degree of harm that had come to the river, its wildlife, and the public services it provides - boating, swimming and fishing among others.

The Patuxent River damage assessment was exemplary in the level

### **Improvement of recreational opportunities.** **These include:**

Creating two canoe/kayak paddle-in campsites on the Patuxent River

Establishing a disability-accessible canoe/kayak launch at Greenwell State Park

Improving recreational opportunities at Maxwell Hall Natural Resource Management Area

Improving a boat ramp at Forest Landing

Rebuilding the King's Landing boardwalk and providing canoes for a river education program

Building a fishing pier at Cedar Haven Park

Establishing boat access at Nan's Cove near Broomes Island

In all, more than \$2 million in restoration projects will be implemented in the coming years, addressing

of cooperation, concern and communication among the public, the trustee agencies, and Pepco, one of the parties responsible for the spill. In response to public interest, Maryland Governor Parris N. Glendening established a Citizens Advisory Council consisting of local residents, elected officials, scientists, and representatives from environmental groups to keep the trustees apprised of community concerns as the assessment progressed. Residents turned out by the hundreds at meetings held immediately after the spill, and Pepco made communicating with them a priority, establishing multiple public information centers, mailing information to residents, even sending employees door-to-door to explain the activities underway.

### Estimating Injury

As part of the damage assessment, oiled wildlife was pulled from the water and beaches, to be rescued and cleaned if they were found in time, and if not, preserved for later injury counts. Testing of water and bottom sediments estimated physical and chemical changes to the estuary. Local bird populations were watched for symptoms of contamination.

In all, more than 25 scientific studies were conducted to determine the nature and extent of natural resource and service injuries. After reviewing these studies, the trustees estimated that the following injuries had occurred to the river and the community:

- 76 acres of wetlands had been contaminated with oil
- 10 acres of beaches had been oiled
- 600+ ruddy ducks and other birds had been killed
- 122 diamondback terrapins had been killed, and the future reproduction of this species had been reduced by 10% for the coming year.
- 376 muskrats had died.
- 5,000+ pounds of fish and shellfish had been killed.
- 4,000+ pounds of creatures from benthic communities (the ecosystems on the bottom of the river), had been killed or reduced.

Natural resources weren't the only injuries identified, and trustee economists conducted studies to determine the full extent of the impact to recreation - swimming, boating, fishing and other shoreline uses that were affected. Agency officials conducted on-site surveys along shorelines, flew helicopter surveys over the river to count recreational activity, and reviewed information on the use of local beaches. After careful analysis, the trustees estimated that 125,000 river trips were impacted by the spill.

### Restoration Begins

Once the full range of injuries were determined, the next step was to identify projects that would restore the resources and address the impact to recreational services. Trustee representatives met with the Governor's advisory committee, other local residents and scientists to find out what kinds of restoration projects would best fit the communities impacted by the oil and address the injuries. After a deliberative process, the following restoration projects were identified:

#### ***Creation of approximately six acres of tidal marsh next to Washington Creek, a tributary of the Patuxent.***

This wetland would be similar to those impacted by the spill and provide habitat for juvenile fish, shellfish, birds and mammals. It would also improve water quality by filtering sediments and other pollutants from the water column, and provide storm surge and flood protection.

#### ***Creation of approximately one acre of beach habitat to benefit diamondback terrapins and other organisms.***

the acres of oiled wetlands, the hundreds of dead birds and other wildlife, and the thousands of recreational trips that never occurred after the spill.

Any environmental disaster is a terrible thing to witness. The people who live on or near the Patuxent, those who fish its waters, and anyone who loves the river were dealt a stunning blow when the Chalk Point spill occurred. But the infrastructure to deal with the calamity was quickly brought into play, and the cleanup was pursued vigorously. Pepco worked diligently to be a good corporate citizen of the watershed in the aftermath of the spill. And the people of Maryland and the Patuxent will ultimately have redress for the damage that was inflicted upon the environment through a broad range of restoration efforts.

***Acquisition and restoration of ruddy duck nesting habitat in the Prairie Pothole Region of the Midwest.***

Ruddy ducks breed only in wetlands located in the Midwest and southern Canada, and migrate to the Chesapeake Bay to spend the winter. Restoring and protecting their nesting habitats will improve ruddy duck populations in the Bay.

***Creation of approximately five acres of oyster reef sanctuary in the Patuxent River to address injuries to fish, shellfish, birds and bottom-dwelling organisms.*** Oyster reefs enhance bottom-dwelling organisms and habitat, increase food for fish and birds, and improve water quality by filtering sediments and pollutants.

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