

ENVIRONMENTAL SYNOPSIS

The Chairman's Corner

Rep. Scott E. Hutchinson, Chairman



As Thanksgiving Day passes and Christmas looms around the corner, Northwest Pennsylvania - and in fact the entire Commonwealth of Pennsylvania - received what on the surface would appear to be an early Christmas present from - of all places - Washington, D.C. A closer examination, however, shows that the "present" was hard-earned, well-deserved and something for which we can all be thankful.

In the waning days of November, U.S. Congressman John Peterson of Pennsylvania's 5th District was successful in seeing to it that language designating the state's Oil Heritage Region as a **national** heritage area was included in a federal appropriations bill sent to President Bush. The national designation will have a profound and positive impact that will spread from the Venango/Crawford County home of the heritage region all across Pennsylvania. The Oil Heritage Region, of course, commemorates the site where Colonel Edwin Drake drilled the world's first successful oil well in 1859, fueling an industrial revolution, making Pennsylvania a "keystone" in the revolution and ultimately making possible the growth of the United States into a world power.

National designation brings several clear-cut benefits to the Oil Heritage Region. The region will now be eligible for up to \$1 million per year in federal funding to develop educational and recreational programs, restore historic buildings and sites, help revitalize communities, promote inter-governmental cooperation and increase public awareness about the history of the "Valley that Changed the World." In addition, there will be some immediate start-up money for the region to assist in the short-term. There is also specific funding of \$150,000 in the legislation for historic preservation funding for the Drake Oil Well in Titusville, especially timely since the Drake Well's 150th anniversary will be celebrated in 2009. Finally, the legislation addresses property rights concerns by requiring the written consent of private property owners before their properties can be used in conjunction with a national heritage area.

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NOTES FROM THE DIRECTOR

CRAIG D. BROOKS, DIRECTOR

The name, "Erie Bluffs State Park" has a nice ring to it...And now it's more than just a name. The largest tract of undeveloped land along the Lake Erie shoreline was actually purchased last year by the Western Pennsylvania Conservancy and became the commonwealth's 117th state park over the summer.

The idea for acquiring the land was actually started several decades ago by a group of local residents and it has gained widespread community support over the past few years. The site is a world-class steelhead fishery with a "viewshed" that has been noted in international publications as "truly spectacular".

The land purchase, made possible with the help of the Richard King Mellon Foundation, the Conservation



Fund, the CS Mott Foundation, the Lake Erie Region Conservancy and the Pennsylvania Department of Conservation and Natural Resources (DCNR), includes a 540-acre tract of land in western Erie County.

The project has demonstrated the power of local, state and national organizations in forming partnerships to conserve critical resources of the Great Lakes. Because most of Pennsylvania's shoreline is in private ownership and unavailable for public access along the lakefront, it was thought that conserving this area and allowing controlled access would preserve the property from development and relieve some of the tourism pressure experienced at nearby Presque Isle State Park. Presque Isle State Park averages 4 million visitors each

year and is one of the most heavily visited parks in the United States.

In addition to a mile of shoreline with 90-foot bluffs, the property also contains old-growth forests, rare floral communities, an uncommon oak savannah sand barren ecosystem, wetlands and significant archaeological sites. The challenge was not to merely preserve the site, but to allow for public access and make the best use of the property while still maintaining the land's integrity.

It looks like that will be accomplished. There is a comprehensive management plan underway to protect and enhance the steelhead fishery; preserve exceptional value wetlands in the area, promote and enhance the natural heritage of the region and restore some of the natural areas that have been previously altered. It is a win-win situation for everyone.

As DCNR Secretary Michael DiBerardinis put it, *"Aspects of this property compliment Presque Isle State Park and the Tom Ridge Center creating opportunities for multiple day visits, recreational opportunities and educational study among the three sites. This is a remarkable piece of land and will make a wonderful addition to our public lands"*.

I recently had the opportunity to visit Erie Bluffs State Park and I couldn't have said it better myself.

(Photos Courtesy of PA DCNR)



RESEARCH BRIEFS

Each month, the committee's staff researches and prepares a number of "briefs" on several topics relevant to the Joint Conservation Committee's mission. Very often, these briefs include references to reports and further research on the topics so that readers may pursue issues on their own.

Critical Staffing Shortages in National Parks

— Tony M. Guerrieri, Research Analyst

The National Park Service is a mammoth organization. With some 20,000 professionals and 125,000 volunteers, it oversees 387 parks, monuments, battlefields, historic sites, recreation areas, scenic rivers and trails, and the White House. In recent years, concern has grown over the health of America's national parks, which now serve about 300 million visitors a year.

A report by the National Parks Conservation Association (NPCA) examines what deterioration in visitor services or park resources is occurring at ten park units, what factors contribute to any degradation of visitor services and parks' natural resources, and what choices are available to help deal with identified problems.

According to the report, *"Endangered Rangers: A Study of the Severe Staffing Shortages Crippling America's National Parks"*, parks are getting just two-thirds of the funding they need, leading to staffing shortages and the deterioration of park facilities. As a result, visitor centers have reduced operating hours or have been closed altogether for months at a time. Public education programs have been reduced or eliminated. Among the trouble spots, according to the NPCA, is the Gettysburg National Military Park that denied education requests from one out of every four schools – affecting 2,500 students annually.

The report indicates two factors particularly affected the level of visitor services and the management of park resources. These were (1) chronic funding shortfalls for the park system, and other expensive obligations (i.e., cleaning up after hurricanes and other natural disasters), and (2) – since the terrorist attacks of 9/11 – providing extra security for places like the Statue of Liberty and the Washington Monument when the Department of Homeland Security declares a Code Orange Alert.

The report documents a service-wide budget shortfall of over \$600 million annually. The National Park Service's operating budget, when adjusted for inflation,

has dropped about 20 percent in the past 25 years. If there are no funds to address deferred maintenance, there is not enough to police the parks either. The number of protection rangers – those rangers who not only help guide tourists from place to place but are also sworn law enforcement officers – has fallen, even as their responsibilities have become greater. There were 1,841 commissioned permanent rangers and 616 seasonal rangers in 1980. By 2001, the number of permanent rangers had dropped 16.4 percent, to 1,539, and the number of seasonal rangers had dropped 76 percent, to 147. During the same time, visitation to the parks has increased by more than 60 million people, the number of units has increased by 54 and the need for the rangers has grown.

The report notes a budget shortfall of over \$600 million and a shortage of rangers to police parks

Increased responsibility was the second factor eroding the parks' ability to keep up with visitor and resource needs. Park rangers are increasingly called upon for security duties, such as protection of dams, borders, and national icons with no additional funding forthcoming. Every time the national terrorism alert rises from yellow to orange, the National Park Service dispatches extra rangers to guard the nation's patriotic icons – the Statue of Liberty, Mount Rushmore, Independence Hall, and the Washington Monument – at a cost of \$64,000 a day. This diverts funds from the parks' operating budgets, and when rangers from parks such as Rocky Mountain and Shenandoah are sent to guard dams and icon parks, their positions remain unfilled.

According to the report, without sufficient operating budget increases, and allocations from the Department of Homeland Security, the National Parks Service will be unable to catch up on its enormous maintenance backlog, protect park resources, or even provide some of the basic educational services Americans expect during their park visits.

The report recommended a number of short-term actions to immediately address dire staffing needs in the

national parks. These include: seeking donations from private companies, partnering with volunteer groups, and allowing parks to keep more of the fees they collect at entry gates.

But in the long run, the report calls for the park service to receive \$50 million annually from the Homeland Security Department to cover expenses that result from heightened homeland security demands.

The National Parks Conservation Association report is online at http://www.npca.org/across_the_nation/visitor_experience/angeredrangers/angeredrangers.pdf.

Runoff Threatens Water Quality in the Great Lakes

— Craig D. Brooks, Executive Director

Uncontrolled storm water runoff continues to threaten water quality across the United States and poses a particular threat to the Great Lakes region. Several reports released this year have indicated that runoff continues to damage ecosystems, wildlife, and aquatic habitats by washing sediment, heavy metals, oil, grease and debris into waterways. The International Joint Commission estimates that major storm-related discharges to the Great Lakes exceed 100,000 tons per year, and recent state water quality assessments show that urban runoff and storm sewers alone contribute to 15 percent of impaired Great Lakes shoreline. In addition, the U.S. Environmental Protection Agency (EPA) estimates that as much as 150 tons of soil per acre are lost to storm water runoff from construction sites.

A report by the Environmental Integrity Project analyzed the storm water programs of six Great Lakes states (Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin) and compared state storm water regulations and permitting and enforcement information. The report found that despite legal requirements to get storm water permits, only about half of the industrial facilities and approximately one-third of the construction sites actually complied. Of those sites that had permit coverage, noncompliance remained significant.

How is storm water pollution regulated? In most cases, polluted storm water is a point source regulated under the federal Clean Water Act (CWA). Therefore, sources of storm water runoff are required to obtain and agree to the terms of a discharge permit under the CWA's National Pollutant Discharge Elimination System or NPDES Program. The majority of facilities and sites

that are issued a storm water permit are covered under state-issued general permits or permits-by-rule which cover an entire industry. These facilities notify the permitting agency that they intend to be covered under the general permit and develop runoff plans and implement best management practices to control runoff.

Part of the problem in controlling storm water runoff is that industrial and construction sites are self regulating and are not required to submit inspection reports to state enforcement agencies. Most sites never submit their runoff plans for review and usually the permit-issuing agency lacks the manpower to inspect the sites for compliance. According to the report, approximately 20,000 industrial sites in the Great Lakes states have storm water permits and as many as 1,000 more facilities should be permitted, but are not. The large number of regulated facilities combined with a lack of state enforcement resources contribute to the runoff problems in the region. Also, due to staffing shortages, the report found that state agencies lack the ability to adequately monitor and inspect sites they know about, let alone find the facilities that need to be brought into compliance.

In an effort to help control the runoff problem in the Great Lakes region, the report suggests the following:

- States need to improve collection and enforcement data and should require sites to submit self-inspection reports and summaries.
- States need to continue to make use of complaint-based inspections as a way to respond to public concern and promote compliance.
- All Great Lakes states should require sites covered by a storm water permit to submit their pollution prevention plans to the enforcement agency. At a minimum, state agencies should require a plan summary with the intent of taking enforcement action if necessary.
- Local building permits should not be granted unless the builder shows proof of a storm water pollution prevention plan.
- States that do not assess annual fees should consider a fee structure that requires all industrial facilities to pay annual fees and to notify state agencies when they have ceased operations or stabilized a construction area.
- States should build partnerships with local authorities to solicit help with inspections and identify sites that require permits.

The Environmental Integrity Project's report, "*Weathering the Storm; Controlling Storm Water Pollution in the Great Lakes States*", is available on the Internet at http://www.environmentalintegrity.org/pubs/Weathering_the_Storm.pdf.

Texas Coastal Bays and Estuaries Face Water Shortages

– Tony M. Guerrieri, Research Analyst

As population increases in the state of Texas, one of the most critical natural resources that everyone wants and needs is water. As a result, river and stream flows are used, interrupted and rerouted. And, one thing is clear, says a National Wildlife Federation (NWF) report - less and less of much-needed water is reaching coastal bays and estuaries.

The NWF report, *"Bays in Peril: A Forecast for Freshwater Flows to Texas Estuaries"*, examines how Texas' growing water demands and its century-old water permitting process are threatening river inflows that are essential to nourishing marine life in the bays. The report concludes that the seven major bays along the Texas gulf coast and the wildlife and coastal economies they support may suffer serious damage before long unless the state acts to protect them.

Estuaries where fresh water from the river mixes with salt water from the bay nurtures a vast array of life. It is where marine larvae, spats, fingerlings and plankton incubate into adulthood. The marshes, sea grass beds and tidal flats are nurseries for red drum, brown shrimp, blue crabs, southern flounder and speckled trout. Almost all of the gulf's commercially and recreationally important fish and marine species depend on bays during some part of their life cycle.

Texas' water permit policy is largely responsible for the effects on rivers and bays

As the state's population continues to grow and more fresh water is withdrawn from rivers and streams to meet the demand, the NWF report suggests that without adequate freshwater inflows, the health and productivity of the bays and estuaries would decline.

At the heart of the problem is Texas' historical practice of granting water permits without considering their effects on rivers and bays. The state issues permits to various users – cities, industries, farmers – allowing them to withdraw water from a river for consumptive uses. The permits generally are perpetual, meaning they never expire, and apart from a permit application fee, the water is free.

Over the last 100 years, the state has granted permits authorizing 21 million acre-feet of water to be

taken from Texas' rivers and streams every year. After more than a century of this system of allocating surface water, Texas' rivers are in trouble, according to the report. In some cases, permits to take water out exceed the amount of river flow present during dry periods. The report warns that unless something changes, Texas' rivers could continue to dry up, and in the process, deprive coastal bays and estuaries of essential freshwater inflows.

Currently, permit holders are not using their full allotment of water, but that will change as the state's population grows, the report suggests. Increased water demands likely will be met largely by using existing water permits more fully, meaning less water will be flowing to the coast.

To compound matters, cities, businesses and other permit holders are finding new ways to re-use wastewater – for landscape irrigation, for example, or industrial cooling systems – rather than discharging it back into the river. The report suggests that while reuse can be an efficient water use, it also reduces the return flows that are all that keep some rivers flowing during drier times.

The NWF used computer models developed for the Texas Commission on Environmental Quality to determine how much fresh water would make it to the bays if all existing water permits were used to their full capacity and if the amount of wastewater that was reused rather than discharged back into the river increased to roughly 50 percent. The report then compares those results to state estimates of how much freshwater each bay needs. Sabine Lake, Galveston Bay, Matagorda Bay, San Antonio Bay and Corpus Christi Bay are most at risk, according to the report and receive "danger" rankings, which means marine life could decline dramatically unless action is taken. The Upper Laguna Madre and the Copano/Aransas bays systems both receive "good" rankings in the report.

News to Use in the Environmental Synopsis... share it with a friend

The *Environmental Synopsis* is issued monthly.

The newsletter examines timely issues concerning environmental protection and natural resources.

If someone you know would like to receive a copy of the *Synopsis* each month, please contact the committee office at 717-787-7570.



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The report includes several recommendations including making more efficient use of existing water supplies through municipal conservation. Other recommendations include state-offered incentives to people to voluntarily convert their permits to protecting flows into the bay.

The National Wildlife Federation report, *"Bays in Peril: A Forecast For Freshwater Flows to Texas Estuaries"*, is available at http://www.texaswatermatters.org/projects/bays-in-peril/bays-in-peril_report.pdf.

Billions of Gallons of Wastewater Released Annually

— Craig D. Brooks, Executive Director

Sewer overflows cause up to 860 billion gallons of wastewater to be discharged into lakes and rivers in the United States each year. Although discharges have decreased substantially during the last decade, it is estimated that fixing the current problem will cost about \$140 billion over the next 20 years. In its most recent report to Congress, the U.S. Environmental Protection Agency (EPA) details the number of sewer overflows, costs of controls and the impacts to human health and the environment caused by sewer discharges.

There are two types of sewer systems referenced in the report: combined sewer systems and sanitary sewer systems. Combined sewer systems are those in which sanitary wastewater and storm water are carried in the same pipe and are designed to overflow directly into waterways in the event of a storm to keep the excess flow from overwhelming the sewage treatment plant. These systems were built in the 1900's and are found in older urban areas of the mid-Atlantic and Northeast, the upper Midwest and Northwest.



Sanitary sewer systems carry only sewage separate from storm water and therefore are not designed to discharge during wet weather events. Overflows with these systems usually occur due to blockages or the infiltration and inflow of additional wastewater that enters the treatment facility through cracks or other problems.

Both types of systems require a National Pollutant Discharge Elimination System (NPDES) permit but only discharges from sanitary sewer systems are prohibited by EPA. According to the report, 746 communities in 32 states have combined systems with 9,348 outfalls regulated by 828 NPDES permits. EPA estimates that combined sewer overflows (CSOs) discharge 850 billion gallons of untreated wastewater annually, a decrease of more than a trillion gallons each year before 1994, when EPA issued a policy requiring municipalities to reduce the number of overflows. Some communities have addressed the problem by separating the sanitary sewer lines from the storm water pipes.

The funding needs to correct overflows are huge

According to the report, there are 15,582 sanitary sewer systems in communities in the United States plus 4,846 satellite systems that collect and transport wastewater from outlying areas to centralized treatment facilities. These systems have between 23,000 and 75,000 overflows annually, discharging 3-10 billion gallons of untreated sewage. The report further estimates that between 3,448 and 5,576 illnesses occur annually in people exposed to waters contaminated with bacteria and viruses from the overflows.

The funding needs are large. The primary funding mechanism has been through the federal government's clean water state revolving fund which has appropriated about \$1.35 billion annually. However, it appears that the 2005 budget request will only reach \$850 million. In an effort to look beyond the federal government for financial help, communities have spent millions of dollars trying to correct the overflow problem by building additional capacity, identifying and repairing facility defects and cleaning and inspecting sewer operations.

The report, *"Report to Congress on the Impacts and Control of Combined Sewer Overflows and Sanitary Sewer Overflows"* is available on the Internet at http://cfpub.epa.gov/npdes/home.cfm?program_id=5.

ON THE HORIZON . . .

A LOOK AT UPCOMING EVENTS



- ✓ **Monday, February 7, 2005, 12 noon, Room 205, Matthew J. Ryan Building** – Environmental Issues Forum. The first forum of the 2005 legislative session will feature a presentation on the state's brand new Statewide Recreation Plan.

Environmental Issues Forums are open to the public. Please call the committee office at (717) 787-7570 if you would like to attend.

Visit our website (<http://jcc.legis.state.pa.us>) or check future editions of the *Environmental Synopsis* for upcoming events.

Happy Holidays from the Joint Conservation Committee!

COMMITTEE CHRONICLES . . .

REVIEW OF SOME MEMORABLE COMMITTEE EVENTS

As referenced in The Chairman's Corner (see p. 1) the Joint Committee held a meeting earlier this year in Washington, D.C. to support the efforts of the Oil Heritage Region to achieve national designation by Congress. Here are some scenes from that meeting.

At right is U. S. Congressman John Peterson (R-5), featured guest speaker for the meeting. Cong. Peterson spearheaded passage of the designation legislation in the House and ultimately in the federal appropriations bill signed into law by President Bush.

Below, Oil Heritage Region Manager Marilyn Black, Joint Committee Chairman Rep. Scott Hutchinson and Chairman of the Alliance of National Heritage Areas



(ANHA) Augie Carlino chat at the close of the meeting.

And, at right Marilyn Black and Cong. Peterson informally discuss the Oil Heritage Area and its contributions to Pennsylvania heritage development.



The Joint Committee was proud to assist in the national designation effort (see page 7 for some photos) when it brought together local folks with federal decision-makers in February in the nation's capital. The committee's goal was to impress upon those in positions to help, the importance of heritage development and the key role that national designation plays in Pennsylvania's heritage areas, still known to many as heritage parks. We sought to offer our help and bring to a positive conclusion what had become a multi-year effort, always seeming to fall just short. Our meeting was productive and the local-federal team never allowed the Oil Heritage Region goal to drift off the federal radar screen. Now, thanks to Congressman Peterson, and many others, including Oil Heritage Region Executive Director Marilyn Black, the region's local board of directors and Senators Arlen Specter and Rick Santorum, the "quest" has been successful.

The designation of Pennsylvania's Oil Heritage Region as a national heritage area will have a profound and positive impact all across Pennsylvania

The benefits national designation brings will help to create jobs, to advance tourism and to promote economic development. National designation will encourage more people from all over the world to visit the Oil Heritage Region and stay longer when they do. Chances are they will want to then extend their visits to see Pennsylvania's other heritage regions.

The benefits will also help many hard-working local people who in the past have often been forced to work on a shoe string to advance the region. Marilyn Black and the staff and directors of the Oil Heritage Region have already planned multiple projects over the next 15 years as part of the region's management action plan, and their planning and elbow grease deserve appreciation and support.

The success of the Oil Heritage Region is merely the latest example of Pennsylvania's position of leadership in heritage development on the national scene. Six of Pennsylvania's state heritage parks are now national heritage areas as well – more than any other state in the nation. Pennsylvania has clearly been able to build the partnerships – between communities, non-profit organizations, the private sector and the state and federal governments – that successful heritage development requires. The heritage areas link our state's industrial past with our future in unique ways, and provide ways to enjoy history, culture, recreation and Pennsylvania's natural and scenic resources.

Even as we hail the success of the Oil Heritage Region and the Pennsylvania Heritage Parks Program, we can do more. The committee will continue its ongoing efforts to increase state funding for Pennsylvania's heritage parks and to make heritage areas a key part of the state's tourism and development planning. And, we'll encourage everyone – Pennsylvanians and visitors alike – to learn more about Pennsylvania's one-of-a-kind heritage parks program. Visit the Pennsylvania Department of Conservation and Natural Resources (DCNR) website at www.dcnr.state.pa.us/brc/heritageparks to do that.



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