



Economics of a Healthy Delaware River – Jobs and Revenue Jeopardized by Deepening

Economic Value of Oyster Populations of Delaware Bay Threatened by the Deepening:

As the result of a \$6.5 million federal investment in restoring the oyster populations of Delaware Bay, over 2.1 million bushels of clam and oyster shells have been harvested in the Delaware Bay from 2005 thru 2009. For the region, oyster harvest resulting from this federal investment is projected to generate up to and over \$80 million of annual economic benefit, much of this in some of New Jersey's poorest communities who could not tolerate the loss of associated jobs, revenue and benefit.

- Powell, Eric N. *Letter to Tom Micai, NJDEP*, August 25, 2009.
- Tudor, Robert. *Letter to Tom Micai, NJDEP*, August 25, 2009.
- Powell, Eric N. 2005 to 2008 Shell Planting Program in Delaware Bay: Spring 2009 Update. Haskin Shellfish Research Laboratory. February 17, 2009.

Economic Value of Horseshoe Crabs and Migratory Shorebirds Put at Risk by Deepening:

The annual economic value of migratory bird and horseshoe crab phenomenon in the Bayshore area provides \$25 million in benefits to the Delaware Bayshore area and \$34 million regionally. Because most of these expenditures occur in the “off-season,” they are particularly valuable to local economies.

- Eubanks, Ted; Stoll, Paul Kerlinger. 2000 “*Wildlife-associated Recreation on the New Jersey-Delaware Bayshore, The Economic Impact of Tourism Based on the Horseshoe Crab-Shorebird Migration in New Jersey*”. 16 February 2000. Prepared for the NJ Dept of Environmental Protection.

Horseshoe Crab dependent ecotourism generates between approximately \$7 million and \$10 million of spending in Cape May, New Jersey alone, and creates 120 to 180 related jobs providing an additional \$3 million to \$4 million in social welfare value.

- Walls, Berkson & Smith, The Horseshoe Crab, *Limulus Polyphemus: 200 Million Years of Existence, 100 Years of Study*, Reviews in Fisheries Science, 2002.

The U.S. Fish and Wildlife Service valued annual revenues associated with the LAL (a valuable substance found only in the blood of horseshoe crabs) industry at \$60 million with the social welfare value at \$150 million. One pint of Horseshoe Crab blood is worth \$15,000 to the bio-medical industry.

- Nature PBS Special. 2008. Crash: A Tale of Two Species

Economic Value of Blue Crabs Put at Risk by Deepening:

The Blue Crab commercial fishery added at least \$7 million to the annual economy of the Delaware Estuary region in 2005. In that same year, the recreational Blue Crab fishery contributed over \$3 million to the New Jersey side of the Estuary alone. The Blue Crab fishery is often described as the “most lucrative” commercial fishery in the Delaware Estuary.

- Kauffman, Belden & Honsey, *Technical Summary: State of the Delaware Basin Report*. University of Delaware: 2008. Available at:
 - <http://dspace.udel.edu:8080/dspace/bitstream/19716/3808/1/StateoftheDelRiverBasin08.pdf>

Deepening threatens a wide variety of recreational and sport fish and therefore poses harm to the jobs and industries associated:

Spending in the Delaware River and Estuary region by recreational anglers is valued at \$62 to \$100 per day.

- Partnership for the Delaware Estuary. 18 *Estuary News: State of the Delaware Estuary 2008* 3. Summer 2008, Pg. 4.

NOAA reported in 1991 that roughly 155,000 people spent almost \$60 million fishing in Delaware’s waters resulting in \$29 million in earnings, and supporting 1,605 jobs. In that same year, 950,000 people spent more than \$630 million fishing in New Jersey's waters, resulting in \$400 million in earnings, and supporting 16,750 jobs.

- <http://www.nmfs.noaa.gov/habitat/habitatconservation/publications/habitatconnections/num3.htm>

Deepening jeopardizes further the Atlantic and Shortnose sturgeon populations of the Delaware River depriving us of any potential to restore the economic benefits and jobs associated with the historic caviar industry of the region.

Historically Delaware River sturgeon fueled a massive caviar industry, generating a wealth of economic income and jobs for the region – at one time, 75% of the sturgeon harvested in the United States came from the Delaware River. \$16.4 million worth of sturgeon were caught along the East Coast in 1890, when the industry was operating full-bore -- most of that came from the Delaware. \$16 million today is worth over \$422 million using the Consumer Price Index.

- Wirgin, Grunwald, Stabile, Waldman. *Genetic Evidence for Relict Atlantic Sturgeon Stocks along the Mid-Atlantic Coast of the USA*. North American Journal of Fisheries Management 27: 1215, 2007.

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