



## Proponent View Summary

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<b>Bottom Line</b>	<p><b>It is necessary to deepen and widen shipping channel to keep US ports and Delaware River Ports competitive in a global economy. The Delaware River deepening project is beneficial and cost effective and can be performed in an environmentally safe manner.</b></p>	<p><b>The cost and environmental risks of deepening the shipping channel outweigh the economic benefits.</b></p>
<b>Economic Viability of Delaware River Ports</b>	<p>The deepening project is crucial to the long term economic viability of the Delaware River ports. Without deepening, newer, larger vessels will no longer be able to navigate the Delaware River, but will be able to navigate all of the other major eastern ports including New York and Baltimore. The Panama Canal enlargement and possible new Arctic shipping routes also are key drivers.</p>	<p>Mega ships of the future require a depth of at least 50' and could not be accommodated by the Delaware River regardless of the proposed 45' deepening project. No shipping firm is going to send ships 80 miles up the Delaware River when there are deeper ocean ports like NY. The shipping niche enjoyed by the Delaware river Ports (Philadelphia, Camden and Wilmington) will be the same even after deepening; they will continue to serve as local feeder ports.</p>
<b>Prevent Job Loss/ Create New Jobs</b>	<p>Project will create new jobs and prevent existing jobs from being lost to other eastern ports, which can accommodate these larger vessels. The deepening project could potentially fuel a \$200 to \$300 million expansion of the Port of Wilmington, with new berthing facilities constructed out into the Delaware River.</p>	<p>Deepening the channel will not bring more maritime commerce to the Port of Delaware; economic benefits will accrue to Pennsylvania ports only. Skeptical of claims of job creation and additional cargo handling, citing previous ACOE documents indicating that no more jobs will be created nor will there be an increase in volume of tonnage shipped up the river.</p>
<b>Cost/Benefit Analysis</b>	<p>U.S. General Accountability Office (GAO) review of the project verified that the project has positive cost/benefit based solely on direct impacts. A substantially greater economic benefit would be realized if indirect impacts were also considered, but indirect impacts to private business are not considered in Federal cost/benefit analysis methodologies.</p> <p>Non-market benefits from the restoration of Kelly Island and Broadkill beach are not included in this estimate and might increase the benefit to Delaware.</p> <p>GAO is conducting another analysis, which is expected to be completed in April, 2010.</p>	<p>In 2002, the federal government's GAO found "serious problems...including miscalculations, invalid assumptions and outdated information" with ACOE's economic analysis. The net effect was a benefit reduction from \$40M to \$13.3 M and requirement for a comprehensive reanalysis. ACOE submitted a reanalysis to DNREC later that year, but a hearing officer, selected for his dredging expertise, recommended in 2003 that environmental permits be denied. Non-market environmental costs not included in the analysis include sediment load, water quality/turbidity, pollutant emissions from sediments, impact on fisheries, biological window violations and saltwater intrusion. ACOE agrees that the following uncertainties remain: commodity growth rates, cost and price of lightering operations, landside transportation costs estimates and container volume estimates, dry bulk with project condition fleet shift, timing of refinery responses to deepening. Not all facilities support the deepening. In 2003, Coastal Eagle Point wrote that "while Coastal understands that a deeper channel would be beneficial to some users...Coastal is unable to support the stated savings and considers it possible that our transportation costs would increase under with-project conditions...and costs associated with berth modifications</p>



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<b>Cost/Benefit Analysis</b>		<p>necessary to accommodate deeper vessels are unknown at this time and may be prohibitive.” In 2001 Motiva Refinery wrote that “the dredging project will increase shoaling at the refinery by a factor of 1.5 to 2.0,” resulting in an increase in their annual maintenance dredging costs. Also, the 2009 closing of Valero’s refinery (formerly Motiva) is not included in either the costs or benefits.</p>
<b>Environmental Impact</b>	<p>The ACOE spent \$15 million on detailed environmental studies to plan for this project and has concluded that it can be completed in a monitored and environmentally sensitive manner that will not adversely affect the environment or fisheries.</p> <p>Environmental protections have been built into the project, including “biological windows” – times during the year when dredging will be halted - to protect spawning ground for many creatures and for herons. An additional \$10 million has been allocated to environmental verification (monitoring during and after the project) as mutually agreed with state environmental agencies.</p>	<p>Environmental impacts have not been sufficiently documented and addressed to allow the deepening project to begin. The project, as proposed, could cause harm to fisheries and the ecosystem. The ACOE environmental protection claims are inconsistent and contradictory. For example, ACOE says they will make every effort to abide with biological window restrictions; however in some cases, work must be done within these windows and no significant damage is expected. ACOE says the increase in cost to observe these windows is prohibitive to constructing the project. In order to construct Kelly Island, the ACOE said they need complete relief from biological windows for one season.</p>
<b>Regulatory Permits</b>	<p>The ACOE submitted environmental reports and permit applications in 2000 to DNREC.</p> <p>After waiting 6 years for Delaware to take action on their permit applications, the ACOE proposed to start deepening in January 2010 without the permits, citing Federal rights of navigational servitude to promote interstate commerce.</p>	<p>Permit applications are deficient. The project as proposed does not satisfy federal or State of DE regulations, including:</p> <ul style="list-style-type: none"> <li>• Clean Water Act,</li> <li>• Clean Air Act (lightering is one of the largest releasers of ozone precursors and dredge barges will be similar),</li> <li>• National Environmental Policy Act (NEPA), and</li> <li>• Coastal Zone Management Act</li> </ul>
<b>Volume of Material to be Dredged/Blasted</b>	<p>More accurate volume estimates are now available because the technology for marine surveying has gotten significantly better (from single beam to multi-beam surveying technology). Using the new technology, the ACOE re-calculated the volume of dredged material with more certainty and found they will need to remove less sediment for the deepening project (16 million cy rather than 26 million cy) and also less sediment for long term maintenance than previously thought. Additionally, in the future, less sediment load is expected in channel because of tighter erosion and sediment control restrictions on land-based construction projects.</p>	<p>DNREC does not agree with the volume of sediment, sand and rock to be removed during the deepening project and has questioned the ACOE’s calculations. Since then, the ACOE has used more detailed survey techniques to map the river bottom.</p> <p>Rock blasting at Marcus Hook will threaten a drinking water aquifer that travels under the river at this point, and may damage fisheries.</p>
<b>Dredged Material Placement</b>	<p>Most of the dredged materials will be deposited on New Jersey lands. ACOE has sampled the sediment in the bottom of the channel 4 times over the years, in 1-foot vertical increments, and has collected and analyzed a total of 170 samples. With few minor exceptions, the dredged sediment material will meet NJ residential soil standards. In a</p>	<p>Dredging will liberate toxic chemicals from the bottom sediments and reintroduce them into the river. DNREC identified heavy metal “toxic hot spots” in some of the areas to be deepened [and widened]. Dredged material deposited on land contributes the same toxics to the River during the dewatering process.</p>



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<b>Dredged Material Placement</b>	<p>few samples, heavy metals and PCB congeners were present at low levels, and the sediments met the NJ soil classification standards for industrial use.</p> <p>Delaware will receive none of the silty dredged materials. About 4.0 million cubic yards of sand dredged from Delaware waters will be used beneficially, to replace eroded shoreline at Broadkill Beach and Kelly Island. On Kelly Island, currently, the freshwater wetlands are eroding and silt is being deposited on potential oyster beds downstream, damaging oyster production. The shoreline stabilization will create 80 acres of freshwater wetlands, habitat for horseshoe crabs and birds, and protect the freshwater wetland from eroding and /or being impacted with salt water.</p>	<p>DNREC questions how much of the dredged material will be sand rather than silt, and how the ACOE will monitor the grain size during dredging. The beneficial locations described would be enhanced by sand placement, but they would be destroyed by silt placement.</p> <p>Some of the project benefits are overstated. The use of dredged sand to improve Kelly Island may not be as beneficial as originally thought, because new sea level rise projections show inundation sooner than originally expected.</p>
<b>Salt Water Intrusion Impact on Drinking Water Aquifers that serve DE and NJ</b>	<p>The ACOE estimated that salt levels would not exceed 180 ppm which is less than the 200 ppm drinking water standard.</p>	<p>In NJ, aquifers are being recharged by the Delaware River. This is not normal, but is the result of urbanization and groundwater pumping. Will the deepening coupled with sea level rise move the salt line up the river far enough to threaten drinking water supplies? The U.S. Geological Survey (USGS) studied the relationship between the location of the salt wedge, the deepening project and the aquifers in South Jersey and Delaware. The analysis was done under the worst case (1960s) historical drought conditions. Findings showed the salt wedge would move upriver an additional 1 to 1.5 miles.</p>
<b>Liability for Environmental Damages</b>	<p>ACOE reports that environmental studies have been completed and environmental impacts have been evaluated and the deepening will be completed according to plan. The project includes a large budget (\$30M) to address environmental issues..</p>	<p>The project includes no specific provisions for environmental liability by ACOE or PRPA. If the project damages the river, it will be very difficult to hold anyone accountable. ACOE has indicated they are only responsible for willful negligence on part of their contractors and are not responsible for anything else which could go wrong. PRPA's liability is not mentioned in the application. Responses to environmental damage, cleanup, etc. would have to be borne by the State of Delaware, and loss of fisheries would have to be borne by the industry; these liabilities are not acceptable.</p>