

ingress and egress and ability to enjoy and use his property. Mr. Wien filed his permit application jointly with the Andersons who own the adjacent property and share the same lagoon for access.

DNREC rejected Wien's application by letter dated September 29, 1993, primarily for failing to satisfy the avoidance and minimization criteria in §§ 3.01-3.04 of its Regulations Governing the Use of Subaqueous Lands ("Regulations"). In other words, alternatives were available which were less environmentally harmful. DNREC also noted a failure to analyze the quality of the material dredged since it would be dumped on the Wien and Anderson property and potentially erode into nearby wetlands. DNREC also cited a failure to explore using alternatives to bulkheading which were less environmentally intrusive, as required by §3.04 of its Regulations, such as rip-rap revetment or gabions. A gabion (stones contained in wire baskets) wall could be constructed vertically after dredging to provide a stable foundation. In short, DNREC raised legitimate objections to Mr. Wien's application, especially the extensive use of bulkheading and the jetty.

Mr. Wien participated in the federal/state joint permitting process which includes the U.S. Army Corps of Engineers which is involved due to the wetlands. This joint process is designed to provide a more efficient permitting process by enabling the state and federal governments to comment at the same time. Unfortunately, it may not have streamlined the application

process here. Mr. Wien also had to provide a dredging plan to Sussex County.

The evidence revealed that both DNREC and Mr. Wien were very frustrated by the permitting process here and the length of time involved. DNREC believed that Mr. Wien was not seriously considering alternatives and minimization; the implication was that Mr. Wien wanted bulkheading to enhance his property. While bulkheading may provide more pleasing aesthetics, DNREC's environmental concerns should be upheld. Mr. Wien contended that he spent a great deal of time attempting to accommodate DNREC's concerns and he hired many consultants at great expense in an attempt to work with DNREC. Mr. Wien also stated that he provided reasonable cooperation and additional information to DNREC upon request.

Mr. Wien planned to dispose of the spoils from the dredging on his property and Mr. Anderson's property. He testified that the easement which grants access to his property would not authorize dump trucks to truck away the spoils. He also did not simply ask for maintenance dredging since he wanted to complete the entire project at one time and minimize the need for future expense and future dredging. He also objected to gabions since they may be more dangerous to children.

FINDINGS OF FACT

1. The Wien/Anderson lagoon measures approximately 750 in length, 40 feet in width and has a water depth of approximately 1½ to 3 feet. Mr. Wien wants to dredge it to a consistent depth

of 4 feet.

2. Silt has accumulated in the lagoon and at the mouth of the lagoon making it difficult for boaters to travel in and out, especially at low tide. See Wien Exhibit No. 2; DNREC Exhibit No. 2. In the past five or ten years, there has been a great deal of development nearby and the increased boat traffic from these developments or elsewhere appears to be the primary cause of the silt accumulation.

3. Wave erosion is also causing the banks of the lagoon to be washed out from below, at the water level. Mr. Wien desires a bulkhead to keep the sides of the lagoon from washing in. He also wants a 150 foot jetty to prevent the boat traffic from eroding the nearby point of land owned by Bay City and pushing silt from that property into the mouth of the lagoon. See Wien Exhibit No. 1.

4. The testimony concerning the jetty was conflicting. It is unclear whether a jetty would prevent increased silting since the boat waves are approaching perpendicular to the lagoon and to the proposed jetty. Assuming that a jetty may decrease silting in the lagoon or the need for maintenance dredging, it may exacerbate any silting or shoaling problem at the end of the jetty structure.

5. Charles C. Miller, Environmental Scientist, acknowledged that the order of environmental preference of shoreline stabilization methods are vegetation, then rip-rap, and finally bulkheading as the least preferred. He then testified that

bulkheading was the best solution for Wien's intended use, which opinion was shared by John M. Wech, landscape architect. He also contended that rip-rap or gabion baskets would be less effective due to the angle of repose (i.e., the base of the structure must be wider than the top of the structure to support itself). The width of the lagoon is already limited to 40 feet. Mr. Miller also suggested that a combination of low and high profile bulkheads may be an acceptable alternative.

6. Bulkheads, especially lengthy ones, are not the environmentally preferred solution due to the leaching of the treatment chemicals used on the wood, separation of the inner tidal zone, toe erosion, wave rebounding and impact on marine life. DNREC does not encourage a policy which allows coastal wetlands to become encompassed by bulkheading.

7. Tracy Skrabal, a former DNREC program manager and now a self-employed environmental consultant, testified that Mr. Wien did not evaluate sufficiently alternatives to his application and we find her testimony to be credible. She testified that rip-rap and gabions are less environmentally intrusive and much preferred to an extensive bulkhead. She recommended a marsh toe revetment to prevent erosion. More extensive improvements to provide structural stability were not necessary. She also questioned the stability of a stand-alone bulkhead in a marshy area absent a supporting structure or backfilling. Ms. Skrabal stated that rip-rap or gabions, or some combination which may include a limited bulkhead, would be feasible here. Ms. Skrabal also

stated that this project was not evaluated as a routine maintenance dredging project due to Mr. Wien's other requests, which included the bulkhead, spoils being dumped nearby and the jetty.

8. DNREC represented that it would quickly process applications for maintenance dredging. Therefore, if Mr. Wien applied for maintenance dredging he would quickly be provided with a permit authorizing a reasonable method to improve access to his property.

CONCLUSIONS OF LAW

DNREC raised legitimate concerns about Mr. Wien's application. Mr. Wien's stated goal was to improve his access, however his application went beyond simple dredging. The Board agrees with DNREC that the minimization and avoidance criteria in the Regulations were not followed.

The Regulations in § 3.01 require DNREC to evaluate applications and determine whether the applicant's primary objectives and purposes may be realized without unreasonably interfering with the environment and public interest. While DNREC tried to focus Mr. Wien on potential alternatives, including dredging the end of the lagoon and extending the boat dock, using rip-rap or gabions or even a limited bulkhead, Mr. Wien refused to accept these alternatives.

Mr. Wien's application (especially the bulkhead) will have a serious impact on vegetation, benthic organisms and tidal habitat and therefore the balancing test required by the Regulations

supports DNREC's denial. See Regulations §§ 3.01 and 3.01(B). The leachate from the treated wood in bulkheads is most harmful in dead-end lagoons which do not have much water circulation. DNREC's concerns about potential damage to the tidal wetlands marsh from bulkheading, backfilling and erosion of spoils were justified.

Under Title 7, chapter 72, of the Delaware Code, DNREC must evaluate the environmental impact of subaqueous land permit applications. DNREC may impose reasonable limits in permits to protect the environmental and public interest. Thus, DNREC must be reasonable in its permitting decisions and it acted reasonably here. Wien's failure to select any alternatives to the bulkhead and jetty resulted in the denial. He failed to mitigate the anticipated environmental harm from his project. See also Regulations § 3.02.

Section 3.04(A)(4) of DNREC's Regulations Governing the Use of Subaqueous Lands states:

(4) Vertical-walled structures shall be allowed only where a non-vertical structure, designed to equal standards, would be ineffective to control erosion, where deleterious environmental effects associated with the construction of vertical structures would be less than the impacts on the adjacent environment during construction of a non-vertical structure, where functionally no practical alternatives exist for certain water-dependent facilities or activities, or where generally accepted engineering practices would preclude the use of non-vertical walled structures.

Here, there are alternatives available other than 1100 feet of bulkhead to achieve the structural stability of the banks of


the lagoon, including the use of rip-rap revetment or gabions, or relocating the boat docking facilities toward the mouth of the lagoon. Bulkheads should only be used when other options are not feasible. Id.; see also §3.04(A)(2). Another alternative was maintenance dredging without major structural improvements.

We reject Mr. Wien's contention that DNREC's denial unfairly impacted his access or riparian rights. DNREC indicated it would quickly process an application requesting maintenance dredging or reasonable access; it was the questions about the bulkheading, jetty and location and depth of the spoils which prompted the denial. Thus, DNREC has not denied a riparian landowner reasonable access here. The objections of DNREC were reasonable and consistent with the balancing of the public and private interests required by Title 7 and the regulations. Richard A. Hassel testified that the Army Corps of Engineers also asked Mr. Wien to consider alternatives to minimize the environmental impacts and he failed to respond.

DNREC raised legitimate concerns about Mr. Wien's application. Unfortunately, both DNREC and Mr. Wien became frustrated in their dealings on this permit application. However, DNREC followed the standards imposed by statute and its Regulations and properly requested Mr. Wien to select less environmentally intrusive alternatives. In appeals to the Board, appellant has the burden of proof to show that DNREC's decision was not supported by the evidence. 7 Del. C. § 6008(b). Mr. Wien did not satisfy that burden here.

CONCLUSION

Therefore, for the foregoing reasons, the Board affirms
DNREC's denial of Mr. Wien's permit application.


Clifton H. Hubbard, Jr.
Chairman
6/25/94

Robert S. Ehrlich

Charles Morris

Robert I. Samuel

DATE: June _____, 1994

CONCLUSION

Therefore, for the foregoing reasons, the Board affirms
DNREC's denial of Mr. Wien's permit application.

Clifton H. Hubbard, Jr.
Chairman

Robert S. Ehrlich

Charles E. Morris

Charles Morris

Robert I. Samuel

DATE: June 27, 1994

CONCLUSION

Therefore, for the foregoing reasons, the Board affirms
DNREC's denial of Mr. Wien's permit application.

Clifton H. Hubbard, Jr.
Chairman

Robert S. Ehrlich

Robert S. Ehrlich

Charles Morris

Robert I. Samuel

DATE: June 25, 1994


CONCLUSION

Therefore, for the foregoing reasons, the Board affirms
DNREC's denial of Mr. Wien's permit application.

Clifton H. Hubbard, Jr.
Chairman

Robert S. Ehrlich

Charles Morris



Robert I. Samuel

DATE: June 27, 1994