



**TOWN OF HOLDEN BEACH
BOARD OF COMMISSIONERS
WORKSHOP**

TUESDAY, SEPTEMBER 22, 2009 – 7:00 PM

DISCUSSION WITH APPLIED TECHNOLOGY AND MANAGEMENT OF PROPOSED BEACH MANAGEMENT PLAN

The Board of Commissioners of the Town of Holden Beach met for a Workshop on Tuesday, September 22, 2009 at 6:00 p.m. in the Holden Beach Town Hall General Assembly. Present were Major J. Alan Holden; Mayor Pro Tem Miller Sandy Miller; Commissioners Ray Lehr, Don Glander and Ken Kyser; Town Manager David W. Hewett; Town Clerk Heather Finnell; Zoning Official Rhonda Wooten; and Public Works Director Chris Clemmons.

Mayor Holden called the meeting to order. Town Manager Hewett introduced Fran Way and Dr. Mike Jenkins of Applied Technology and Management. Fran Way provided project history. He showed a slide that showed the accretion from the projects over the past several years. The existing permits expire December 31, 2009. There is approximately 65,000 cubic yards left on the permit. The permit was originally for 800,000 cubic yards. The existing permit has two permitted borrow areas, the Smith site and Turkey Trap. As a result of meeting with NCDENR and USACE in June, it was recommended to extend the existing permit. If an emergency occurs it would need to be modified again for volume and potentially a new borrow area. Mr. Way reviewed the Corps plans for the future. The County plans to put about 90,000 cubic yards of sand on the beach. Town Manager Hewett explained that the permitting effort for that hasn't begun yet. Both of the grants applied for fell through.

Mr. Way explained the goal of the new permit is no net reduction. Based on recent projects 125,000 – 250,000 cubic yards is needed annually. With the new permit we need to be aware of the new permit regulations. 300,000 cubic yards per year is the new trigger for a static vegetation line. The goal of the borrow area investigation is to identify sand sources to support a long term management plan and the next permitting effort. Turkey Trap is a currently permitted upland site. It is Holden Beach owned and a 3.6 mile drive to the location. The one downside is there is a good amount of wetlands on the property so wetland monitoring is necessary. The Smith site is the one the Town has used for the past few projects. It is still permitted, but the availability is questionable because the owner wants to develop it. The Tripp site is about a 13 mile drive and is not currently permitted. The sand quality of the Tripp site is good quality and has nice color.

Inlet/AIWW Confined Disposal Facilities - Monk Island has good and bad sand. Mr. Way explained that due to its location you could use hydraulic or mechanical dredging. There are layers of different sand quality at that location. Sheep Island also has some good and bad quality sand. There could be some separation techniques available to use the sand from Monk Island or Sheep Island. There are four shipwrecks in the Lockwood Folly area, two of which are historical. The shipwrecks could cause damage to a dredge. Typically the sand for Corps projects from the Shallotte Inlet gets distributed to Ocean Isle.

Offshore – Geologically speaking, there is no sand available in the Northern half of Long Bay. The Corps has done a lot of studies offshore. The subcontractor that performed the study said there are 60 million cubic yards of reworked sediments available, but after further review a lot of the sand is not beach compatible. Mr. Way stated they looked through all the data and identified four primary offshore borrow areas and reviewed each one. Mr. Way showed a slide of a model of the North Myrtle Beach/ Little River borrow area where a project was recently completed.

Mr. Way showed a chart that showed the estimated borrow area volumes and provided a summary of the different areas. Upland sources are good for small projects and dune rebuilding. Sand color and quality can be tricky. They have slower production and shorter life cycles. They can have truck and DOT issues. The Town currently has two permitted sites. Inlet/ AIWW disposal areas have layered material, so separation techniques may be need, which would add to the cost of a project. There are concerns with natural resources and recreation. Reuse of these sites would increase capacity. Offshore sources are good for larger projects. Due to mobilization costs you would have to put down about 600,000 cubic yards of sand to benefit from an offshore source. They are generally "sand starved", but there is precedence with the Little River borrow area. Mr. Way explained that the Lockwood Folly Inlet hasn't been fully utilized over the past few years. The Corps' plan is to put 600,000 cubic yards from Lockwood Folly onto the beach every four years.

Mr. Way stated that for the path forward they will continue with post-project and annual monitoring. They will extend the existing permit and begin a new permitting program. They were thinking of including an offshore and upland component so either option could be used based on the existing conditions. They recommend beginning the permitting process as soon as possible. The Town needs to continue to coordinate with the Corps on the Lockwood Folly maintenance.

Dr. Jenkins stated that in terms of sand sources there are four things they assess as engineers- cost (overall and per unit), quality, the ability to obtain permits and usable volume. He stated that Holden Beach has done a great job with the projects to-date. The beach is wider and has more volume. Dr. Jenkins stated that the upland prices the Town received in the past have been very good. Dr. Jenkins stated there is no one correct answer. All of the options have pluses and minuses, so the Town should consider everything. Dr. Jenkins stated the Town needs to have permits in place before a storm occurs.

Commissioner Kyser inquired on the cost of permitting an offshore site. Mr. Way explained based on some recent data, it can range from \$30,000 - \$60,000. Permits are good for five years. There is no ownership of the permitted area, but the State would most likely not issue a permit to someone else. Commissioner Kyser stated that during the winter the shape and contour of the beach changes drastically. He asked if any of the extra sand that accumulates could be put into a dune. Dr. Jenkins explained that beach scraping is the term for that and it is not necessarily damaging, but the problem is the sand would go back to an equilibrium state and you don't gain much from it. That technique is typically used post storm, not as a long term solution.

Commissioner Glander inquired if everything is in place to address the permitting for each of these areas discussed. Mr. Way advised no, the Board would have to choose the sites they want to study further. The first step is going to be extending the permit. Mr. Way said there is anywhere between 200,000 - 460,000 cubic yards of sand available at the Turkey Trap site. Commissioner Glander stated it concerns him that the only other permitted source is the Smith site and Mr. Smith may be selling it. Dr. Jenkins explained that this study to identify potential sources was the first step in the process of moving forward. Mayor Holden stated that it is his understanding that Wayne Smith is trying to get permits for an additional site adjacent to his current site. Mr. Way explained that the offshore and upland areas would most likely require an environmental assessment. ATM believes that offshore and upland areas are both relatively low effort when looking at the whole spectrum of permitting. The borrow area identified offshore as a potential source is approximately two miles from the Town. Mr. Way stated the Board can ask him for a proposal on whichever options the Board decides to pursue. Dr. Jenkins explained that now is the time to consider which route they want to go since they need to apply for new permits. Mr. Way recommended keeping Turkey Trap as a source in the new permit. He suggested that the Town could periodically advertise seeking a request for bids to see who has sand available. Commissioner Lehr inquired about the Lockwood Folly schedule. Mr. Way explained the Corps plan is to dredge every

four years. Commissioner Lehr asked about quality and color of sand and if the standards ever change on that. Dr. Jenkins explained that you can wash some of the material at the site, but it adds more complexity and cost. Mayor Holden asked if sand from different sites could be blended as it is delivered in order to come up with good quality material. Dr. Jenkins stated if it is moved hydraulically it is blended in the process. The composite can be permitted.

Ed Brannock inquired if it will be for the same areas that are currently in the permit if the existing permit is extended. Mr. Way explained that the extension would be extending the current conditions, but if another storm came around the permit could possibly be modified to include different areas. Mr. Way said the permit was modified last year and they did get closer to the center of the island. The major problem with the center of the island is the truck access. Mr. Brannock stated that in 1997 Dr. Cleary put out a report saying the center of the beach is the weakest. He would like to know if there are plans to place sand in that area. Mr. Way explained that he would like to put 600,000 cubic yards of sand down, something that would span several thousand feet, including the center of the island. Mr. Brannock talked about the 50-Year Project and stated he doesn't think Holden Beach will ever see the project. Dennis Harrington inquired about the four offshore areas and what keeps the Town from selecting a couple of the areas from being permitted. Mr. Way stated he does think it is a good idea and the Town can save money on those sites, but further testing would be necessary on all of them.

Braden Willis inquired if there is a decision model that talks about the alternatives and the criteria pertaining to each alternative. Dr. Jenkins explained there isn't actually a decision matrix, but there has been general discussion in that direction. Mr. Willis stated he had the opportunity to listen to the executive leadership of the dredging industry on the problems they have mobilizing. He asked if there has been any discussion with other communities to come up with a programmatic approach to dredging the beaches. Mayor Holden said formally no, but informally yes. He explained some of the conversations that have taken place, such as getting together to buy a dredge. The relationship between the communities is excellent. Mr. Willis stated there are some mounds of sand by the pier. He inquired about identifying those places before they get sucked back out and moving them. Mayor Holden explained that the regulators hate to even discuss that. Mr. Way explained that Corps just did the programmatic approach for the Ocean Isle project, but the bids were still too high and they had to rebid it. Mr. Willis stated the problem is how to establish what the mobilization cost is. Dr. Jenkins explained that approach requires the permitting and funding are all in place for each area of the project and the reality is it is very challenging to do that.

ADJOURNMENT

The meeting was adjourned at 7:29 p.m.