

Meeting Minutes
Outer Banks Task Force Meeting
May 11, 2000 at 10:00 AM
The Gallery, Roanoke Island Festival Park, Manteo, NC

A list of the meeting attendees is attached.

▪ **Introduction**

Julie Hunkins, chairperson of the Outer Banks Task Force, began the meeting by welcoming everyone and having participants introduce themselves. She then reviewed the meeting agenda and asked if there were any changes that should be made. The report by the Emergency Ferry Contingency Plan Subcommittee was moved to the beginning of the agenda.

▪ **Emergency Ferry Contingency Plan**

Jerry Gaskill, NCDOT Ferry Division and co-chair of the subcommittee, began by explaining that the purpose of the subcommittee is to establish a ferry-use plan in the event of an emergency situation due to loss of NC 12. He reported that two potential landing sites had been identified for study – one just north of Rodanthe and the other near Avon. The subcommittee believes that the villages of Rodanthe and Buxton are most vulnerable to loss of road access. Mr. Gaskill stated that the group intends to have a draft plan ready by July and will present it to the OBTF at the next meeting. He then listed the steps the subcommittee will take in order to complete the plan:

1. Identify channel depths and alternative routes – Howard Varnam, U.S. Army Corps of Engineers (USACE), will conduct hydrographic surveys and explain what needs to be done and how long it will take.
2. Identify needs within the channel such as fuel, water supply for vessels, docks etc. – Jerry Gaskill and the Ferry Division will determine the needs.
3. Permitting process – Mike Street, Division of Marine Fisheries (DMF), and Charles Jones, Division of Coastal Management (DCM), will identify types of permits needed, anticipated time required to obtain them, as well as the planning and documentation necessary to implement the plan.
4. Emergency management – Sandy Sanderson, Dare County Emergency Management, will address evacuation and re-entry options.

Ms. Hunkins asked if the potential Rodanthe and Avon landing sites are public or privately owned lands. Stan White, Dare County, responded that Dare County owns the land. Jerry Gaskill added that the Ferry Division has the equipment and expertise to build a majority of the facilities.

▪ **Comprehensive Offshore Sand Resources Study**

Ms. Hunkins distributed to each agency one copy of the Comprehensive Offshore Sand Resources Study report that was completed by Steve Boss, University of Arkansas and Bill Hoffman, N.C. Geological Survey. Dr. Boss and Mr. Hoffman will also finalize electronic copies of all the sand resources reports, which will be available to Task Force members and will be posted on the OBTF web site.

- **Status of NC 12 Hot Spots**

Jerry Jennings, NCDOT, began the discussion about the “hot spots” by updating the group on the storm recovery efforts at each site. Dune reconstruction and vegetation were the major activities at the hot spots and have been completed. He added that there is a problem with sand blowing from the new dunes, which covers the road. John Fisher, N.C. State University (NCSU), asked if sand fencing is being considered for the dunes. Mr. Jennings responded that it is.

The NCDOT Division 1 office is currently in the process of applying for permits to construct a secondary dune at the relocated section of NC 12 just north of Buxton. A suitable sand source is available to build the dune. Ms. Hunkins asked about the completion of the secondary dune. Mr. Jennings responded that the permit applications will be submitted within two weeks and the dune should be in place before the most typically active part of hurricane season begins.

- **Risk Assessment**

Dr. Fisher and Dr. Margery Overton, NCSU, briefed the Task Force on the NC 12 Vulnerability Study that they are conducting. They presented preliminary results of the SBEACH model that was applied to the Buxton hot spot area. Two sections of NC 12 were compared for the Task Force, one just north of the relocated section of roadway (Section AA) and the other in the center of the relocated section (Section FF). The model simulated storm conditions based on data from Hurricane Dennis and the Ash Wednesday storm of 1962. The model shows that the existing dune at Section AA survives Hurricane Dennis conditions, while the smaller dune at Section FF fails. Both sections fail under Ash Wednesday storm conditions. The model was also run with erosion taken into consideration. The shoreline was advanced 60 feet (12 ft/yr over 5 years), and the same storm conditions were applied to the area. Under Hurricane Dennis conditions, Section AA failed, but Section FF survived. Again, both failed under Ash Wednesday storm conditions. The model suggests that important factors in survivability are dune volume, dune location, width of the beach, distance between the dune and the active beach, and the type of storm. Based on the early results, Dr. Fisher and Dr. Overton recommended that future dunes be built as far landward as possible, allowing room for a wider beach. They also suggested that alternatives for the hot spots not be designed for storms as severe as Ash Wednesday.

Dr. Bob Dolan, University of Virginia, commented that a dune that fails has done its job and one that survives has been over-designed. Tom Jarrett, USACE, stated that the goal of the vulnerability study is to determine how to bring all hot spots to the

same level of survivability. Spencer Rogers, N.C. SeaGrant, responded that the roadway should not be built too high because the road could be undermined. Mr. Street asked what role the subtidal area plays in absorbing wave energy. Mr. Rogers responded that more sand on the beach results in less long-term erosion.

Mike Bryant, Pea Island National Wildlife Refuge (PINWR), commented that the study should provide an optimum dune elevation and location in order to protect the road and provide a larger evacuation window. Ms. Hunkins stated that the NEPA/404 project team for the Buxton to Avon Interim Improvements Study should discuss whether to evaluate alternatives in the Vulnerability Study based on the Ash Wednesday storm or whether a more moderate storm should be evaluated. Dr. Fisher added that care should be taken in order not to over-design a solution at Buxton.

Ms. Hunkins ended the discussion of the Vulnerability Study by saying that a copy of the report will be provided to the NEPA/404 project team, as well as to OBTF members and friends.

▪ **Interim Improvements Study – Buxton to Avon**

The meeting continued with a discussion of the Interim Study underway to address measures between Buxton and Avon. The study is being conducted by NCDOT with the USACE serving as a consultant. Ms. Hunkins told the group that the NEPA/404 Merger Process project team had reached consensus on the first two concurrence points - the Purpose and Need and the range of alternatives for the study. She continued by reading the agreed-upon Purpose and Need statement as follows:

“Maintain the integrity and viability of the roadway with minimal interruption of traffic service due to a moderate storm event between Buxton and Avon for a period of 5-10 years until a long-term solution is in place.”

“moderate” – Hurricane Dennis or Ash Wednesday equivalent storm event

“viability” – able to safely work to restore temporary access within 48 hours and ultimately approximately the same level of service (February 2000)

Ms. Hunkins then listed the alternatives the project team agreed should be included:

1. No-build/routine maintenance continues
2. Beach nourishment
3. Sheet piling with small dunes (10-15 ft)
4. Sandbags (subsurface) with small dunes
5. Sandbags (surface) – equivalent to large dune (+/- 25 ft – to be evaluated)
6. Roadway relocation (with elevation evaluation)
7. Roadway relocation with large dune
8. Roadway relocation with sandbags and small dune
9. Roadway relocation with sheet piling and small dune

10. Roadway relocation with surface sandbags

It was reiterated that the NEPA/404 project team should meet to discuss the appropriateness of using the Ash Wednesday storm as a design storm event.

Ms. Hunkins was then asked to further explain the term “viability.” She responded that it means the road should remain intact or crews should be able to restore some level of service quickly and safely. The road should also be able to be returned to the February 2000 level of service soon after the event.

Ms. Hunkins continued by stating that NCDOT met with the USACE to discuss specific evaluation criteria about the alternatives under consideration, including design, environmental impacts, sand sources, sand quantities, etc. The scope of work for the project is currently being redefined in order to ensure all criteria are addressed properly in the study. The Environmental Assessment (EA) is expected to be completed by the middle of June. No recommendation will be provided in the EA; however, the NEPA/404 project team will meet in July to reach consensus on a recommendation. The decision-making process will include information from the EA and public and agency comments. Ms. Hunkins added that the goal is to construct at least some parts of the recommended alternative before the most typically active part of hurricane season.

Dr. Dolan took the opportunity to comment that the OBTF Long-Range Transportation Study might want to consider “hot areas” instead of “hot spots.” He stated that the islands will undergo major changes during a large storm. He used Pea Island as an example, saying that it had large overwash channels and a wider beach in the past, but a much smaller storm could create channels there now. It was suggested that Bill Burkmeyer or Tom Jarrett be contacted for data including photos, sequential profiles and sequential storms of the inshore area in order to study shoreline changes. Mr. Sanderson stated that Dare County is working with the USACE to show the erosion/retreat of the shoreline from as far back in history as possible to the present time. Ms. Hunkins offered the use of NCDOT aerial photography if it is needed.

- **Other Interim Improvements to NC 12 at Hot Spots**

Brian Yamamoto, NCDOT, updated the Task Force on the status of the other five interim improvement studies being studied by NCDOT. He began by distributing handouts with a description and current phase for each project. The handout has been attached to the minutes.

Mr. Yamamoto informed the group that the NEPA/404 Merger Process project team will be formed to guide the project development process, including consensus on the Purpose and Need for the projects, as well as alternatives to be studied. He stated that scoping is currently in progress with the consultants that will be working

on each project. A list of the consultants is included with the project description handout.

- **Long-Range Solutions to NC 12 between Avon and Buxton**

Mr. Yamamoto updated the Task Force on the Long-Range Study being conducted between Avon and Buxton. At the time of the meeting, the consultant, URS, was conducting natural systems work in the project area.

Chris Bernthal, National Park Service (NPS), asked about the definitions of “long-term” and “interim.” Ms. Hunkins responded that for the project between Avon and Buxton, “interim” is 5-10 years. For the other hot spots, “interim” means a minimum of 20-25 years. “Long-term” is a minimum of 50 years for all hot spots.

Ms. Bernthal asked if 50 years is too long to expect an alternative, especially a bridge to last. Ms. Hunkins responded that the minimum life expectancy for bridges currently being built is 50 years, based on better designs, technology, and materials.

Noah Matson, Defenders of Wildlife, asked about the difference between NCDOT projects R-3116 and R-4070, both of which are long-term studies along NC 12. Ms. Hunkins explained that because the Buxton area seems vulnerable at this time, a long-term solution (R-4070) should be implemented as soon as possible. R-3116 is the Long-Range OBTF Planning Study for the transportation system along Hatteras and Ocracoke Islands. If funding becomes available to conduct the Long-Range Study, it will begin immediately. Mr. Matson commented that the Long-Term Study between Avon and Buxton should be compatible with the overall OBTF Long-Range Study. Ms. Hunkins responded that the Avon to Buxton study will not steer the course of the other hot spots or the OBTF Long-Range Study.

Tim Keener, URS, then informed the Task Force that the public involvement process has begun for R-4070. A hotline has been established in order to allow the public to speak to someone about the project, leave a message, or ask to be included on the information mailing list. The hotline number is 1-800-816-7817. Mr. Keener continued by saying that OBTF members and friends have already been included on the mailing list. Flyers have also been distributed on Hatteras Island regarding wetland delineation that is taking place in the project area. Ms. Hunkins then asked when the first public meeting would be held. Mr. Yamamoto responded that it had not been scheduled. Ms. Hunkins asked if the OBTF should have an information table to provide information about the Outer Banks Task Force at workshops for the public. Wayne Teeter, Hyde County, commented that it would be a good idea. Mr. Street suggested that the Task Force also look for other opportunities to educate the public about the efforts underway to address transportation and environmental issues. Ms. Hunkins asked that anyone interested in helping with the public involvement to please let her know. Dr. Dolan suggested that the web page be used to explain scientific aspects in a simple way. David Griffin, URS, also suggested that flyers can

be distributed in realty offices, and project consultants and the OBTF can work with the Chamber of Commerce and realtors in order to share the information.

- **Ferry Maintenance Dredging**

Charles Cox, NCDOT, explained issues involving the disposal of dredged material from the ferry channel between Hatteras and Ocracoke Islands. The USACE maintains approximately 80% of the ferry channel in the sound, while NCDOT maintains each end of the ferry channel and the ferry terminal basins. NCDOT currently has two Special Use Permits with the National Park Service for disposal of dredged material on NPS property. One permit on Ocracoke Island will expire in July 2000, and the other at permit on Hatteras Island will expire in March 2001. On Ocracoke Island, the permit allows for the use of an upland disposal site adjacent to the Ocracoke ferry terminal; however, this disposal site has near reached capacity. In order for the permits to be renewed, an EA must be completed to address different alternatives and impacts associated with the disposal of dredged material. Because both the NCDOT and the USACE have similar dredging disposal problems, these agencies will partner to produce the EA. He also commented that several areas of the channel will need to be dredged within the next year.

Trudy Wilder, USACE, stated that the Corps has done some sidecast dredging and is hoping to dispose near the beach within the surf zone in November or December.

Mr. Street suggested that a multi-agency approach be used to determine the best course of action regarding dredging and disposal. Ms. Hunkins responded that a NEPA/404 Merger Process project team will be assembled and scoping comments will be solicited from resource agencies.

Ms. Hunkins continued by saying that the possibility of the USACE dredging state-maintained channels and being reimbursed by the state is being investigated. Other alternatives that are being explored are NCDOT contracting with a private firm or purchasing equipment that would be capable of certain types of dredging. This would increase the number of options that can be explored during the development of a dredge disposal plan.

Ms. Wilder commented that the USACE has already begun partnering with NCDOT to produce a dredging maintenance management plan. Sidney Maddock, Biodiversity Legal Foundation, asked if the plan would include Oregon Inlet. Ms. Wilder responded that it would not.

Stan White, Dare County, then asked if Ocracoke residents could have access to the extra dredged material from Hatteras Inlet. Mr. Benton responded that according to the Dredge and Fill Act, any dredged sand that was once a part of the beach system must be returned to the beach system. (The beach system was defined as reaching from offshore to approximately 30 feet inland.) Mr. Jones then added that only beach quality material is to be returned to the system. Other material, such as

the silt found in Hatteras Inlet, could be offered for use to residents. Mr. Benton agreed, saying that the silt has potential market value.

Ms. Hunkins stated that NCDOT is working on a soil-testing plan with NPS and U.S. Fish and Wildlife Service (USFWS). Mr. Cox stated that there is sand in the open sound area and silt in the ferry terminal basins. Ms. Hunkins added that the different types of material should be kept separate, based on information and conversations she has had with the NCDOT Ferry Division and USACE.

▪ **Status of USACE's Dare County Beaches Study (Oregon Inlet to Ocracoke Inlet)**

The USACE has begun a shore protection study along the North Carolina coast, including Dare and Hyde counties. The focus of the entire study is beach nourishment; however, NCDOT is working with the Corps to link this study to the Long-Range Transportation Study set forth by the Task Force. Both agencies have agreed to a 50/50 cost-share for the study and are working to obtain the federal funding portion.

Ron Fascher, USACE, updated the Task Force on the beaches study the Corps is conducting in Dare and Hyde Counties. The Congressional Appropriations Committee will meet this summer and decide on any Congressional Add. Mr. Fascher suggested that OBTF members and friends should contact the North Carolina Congressional delegation in support of the study. Rolf Blizzard offered to initiate contact with the Congressmen. Next, Mr. Fascher stated that the Long-Range Scope of Study that was drafted in 1994 should be updated. A meeting will be held in Wilmington in June or July to discuss the scope. Agency representatives for the meeting should read the draft scope and be prepared to discuss changes in Wilmington. Mr. Fascher continued by stating that the Feasibility Study Cost-Sharing Agreement between NCDOT and the USACE will be scheduled to be executed in December 2000. The feasibility study will start after that if the Congressional Add is obtained.

Ms. Hunkins asked that each partnering agency appoint one official delegate to the OBTF. These delegates will be the official members of the OBTF and will be responsible for making recommendations to the Executive Committee. These delegates will also be responsible for updating the Long-Range Scope of Study, as well as make decisions on other important issues that may arise in the future. The following delegates have been appointed by their respective agencies:

John Wadsworth	FHWA
Julie Hunkins	NCDOT
Garland Pardue	USFWS
Robin Smith	DENR
Larry Hardy	NMFS
Ron Fascher	USACE
Francis Peltier	NPS

Stan White
Rudy Austin

Dare County
Hyde County

- **Inlet Formation Plan Subcommittee**

The Inlet Formation Plan Subcommittee was established at the last OBTF meeting in February 2000. The purpose of the committee is to develop a plan in the event an inlet is created during a storm event. The plan should address whether the inlet will be closed or left open. Cathy Brittingham, DCM, chairperson of the committee, distributed a list of participants (attached to the minutes) and asked the Task Force for input regarding the geographic scope of the plan, whether it should focus only on the Outer Banks or the entire state.

Mr. Street commented that the plan should focus on the Hatteras and Ocracoke Islands portions of the Outer Banks, which may become a model for other areas. Tracy Rice, USFWS, suggested that the plan could be structured in such a way that it will apply to other areas, but specifics can be added for the OBTF study area (Ocracoke Inlet to Whalebone Junction).

Mr. Maddock asked if the plan would support closing the inlet. Ms. Brittingham responded that different scenarios would be considered. Mr. Rogers commented that if a decision is made to close the inlet, a plan should be established ahead of time in order to close it quickly and minimize overall impact to the environment.

Ms. Brittingham asked if the plan should be detailed, in the form of a Memorandum of Understanding (MOU), or a set protocol for responding to the creation of an inlet. Mr. Street responded that if the plan is to be implemented this hurricane season, then it should be in the form of guidelines that suggest policy for the Task Force to approve and recommend to the Executive Committee. Ms. Hunkins added that the plan should be consistent with the Emergency Protocols that were previously approved by the Executive Committee.

- **Web Page**

Colista Sugg, NCDOT, updated the Task Force on the status of the web page. Changes were made to the page based on comments received from the February OBTF meeting. A "Technical Information" section was added that will contain technical reports, such as the Offshore Sand Resources Studies and the Vulnerability Study. She stated that the web page should be online within one week of the OBTF meeting. It can be found at: www.obtf.org.

- **Other Concerns**

Mr. Teeter stated that there is a problem with flooding and overwash on Ocracoke Island. He commented that drainage should be improved in order to prevent 3-4 feet of standing water on the road. He asked if NPS could give more right-of-way to

NCDOT to allow more room to work without NCDOT having to secure a Special Use Permit from the NPS for work outside of the designated right-of-way. Mr. Jennings responded that sand has built up on each side of the road over the years and that drainage should be provided on the sound side of the road. Mr. Jones stated that there are two issues involved: 1) what to do after a storm and 2) what to do long-term to deal with rain events. He added that water quality is not a major concern after a storm event because everything has been "messed up." It was agreed that CAMA will discuss various options with NCDOT, Hyde County, and any other agency that should be involved.

▪ **Agenda Items for Next OBTF Meeting**

- Buxton to Avon Interim Improvements Study update (NCDOT and USACE)
- Status of NC 12 Hot Spots (Julie Hunkins and Jerry Jennings)
- NC 12 Hot Spot projects update (Brian Yamamoto)
- Dare County Beaches Feasibility Study update (USACE)
- Hatteras Inlet Dredging Maintenance Management Plan (Charles Cox)
- LIDAR (topography) – U.S. Geological Survey (Abby Salinger) - tentative
- Cumulative Impacts of projects along the Outer Banks
- Subcommittee Reports
 - Emergency plans in the event of inlet formation (Cathy Brittingham)
 - Use of ferries in the event of inlet formation (Jerry Gaskill)
 - Web Page update (Colista Sugg)

▪ **Next Meeting**

- Date: Late July or early August
 - Dates that were ruled out:
 - July 26-28 (Coastal Resources Commission meeting)
 - July 20-21 (Marine Fisheries Commission meeting)
 - 1st and 3rd Monday of each month (Dare/Hyde Co. Commission meetings)
- Place: Edenton