



CITY OF BOYNTON BEACH AGENDA ITEM REQUEST FORM

| | Requested City Commission <u>Meeting Dates</u> | Date Final Form Must be Turned <u>in</u> to City Clerk's Office | | Requested City Commission <u>Meeting Dates</u> | Date Final Form Must be Turned <u>in</u> to City Clerk's Office |
|--------------------------|--|---|--------------------------|--|---|
| <input type="checkbox"/> | April 21, 2009 | April 6, 2009 (Noon) | <input type="checkbox"/> | June 16, 2009 | June 1, 2009 (Noon) |
| <input type="checkbox"/> | May 5, 2009 | April 20, 2009 (Noon) | <input type="checkbox"/> | July 7, 2009 | June 15, 2009 (Noon) |
| <input type="checkbox"/> | May 19, 2009 | May 4, 2009 (Noon) | <input type="checkbox"/> | July 21, 2009 | July 6, 2009 (Noon) |
| X | June 2, 2009 | May 18, 2009 (Noon) | <input type="checkbox"/> | August 4, 2009 | July 20, 2009 (Noon) |

| | | | | |
|------------------------------|--------------------------|-------------------------------------|-------------------------------------|-----------------------|
| NATURE OF AGENDA ITEM | <input type="checkbox"/> | Announcements/Presentations | <input checked="" type="checkbox"/> | City Manager's Report |
| | <input type="checkbox"/> | Administrative | <input type="checkbox"/> | New Business |
| | <input type="checkbox"/> | Consent Agenda | <input type="checkbox"/> | Legal |
| | <input type="checkbox"/> | Code Compliance & Legal Settlements | <input type="checkbox"/> | Unfinished Business |
| | <input type="checkbox"/> | Public Hearing | <input type="checkbox"/> | |

RECOMMENDATION: Review report of the Boynton Inlet Committee and transmit findings to Palm Beach County Board of Commissioners as the Inlet is owned and operated by the County.

EXPLANATION: In 2004, the Commission requested and partially funded a study of the Boynton Inlet to identify ways in which its safety could be improved. The bulk of the funding was provided by South Florida Water Management District.

A committee of stakeholders, including surrounding municipalities and various county departments, was formed in 2005. An engineering firm, Applied Technologies Management (ATM), was chosen to do the analysis of possible alternatives. The committee then ranked the alternatives and drafted a final report for submission to the Commission.

The scope of the study was limited due to its level of funding. The alternatives studied were:

- Channel deepening (5' and 10')
- Channel widening (200')
- Channel widening and deepening (50'/10')
- Southerly shift of south jetty
- Changes to bridge: Removal, span, drawbridge
- Ebb shoal dredging and by-pass
- Safety warning enhancements including navigation lighting and channel markers, adverse conditions warning system, and boater education

The committee ranked the alternatives as shown on the next page:



CITY OF BOYNTON BEACH AGENDA ITEM REQUEST FORM

9.1 No Action – Status Quo

The No Action or Status Quo option does not require any changes, hence does not induce any changes to the current state of the inlet and surrounding areas. For this reason it does not accomplish any of the goals of the study. The alternative, however, ranks well in terms of cost and ability to implement.

2. Deepening Alternatives 1 & 2 and Ebb Shoal Dredging – Three options ranked the same, including both deepening alternatives and the ebb shoal dredging option. Both deepening Alternatives 1 & 2 share similar challenges with slightly different advantages and disadvantages. Both would present nearly identical permitting issues mostly related to additional impact to existing hardbottom resources in and around the inlet. Alternative 1 requires less money and time to implement but does not provide the flushing improvement that Alternative 2 offers. Lastly, neither deepening alternative really addresses navigation safety issues. Maintenance dredging of the ebb shoal would perhaps be the single most important improvement to the inlet for navigation safety. The difficulties of maintenance dredging really present themselves in permitting and funding.
3. Shift in South Jetty (50-ft Southerly Shift) – The shift in the southern jetty would not achieve an improvement in water quality, but would provide for a safer inlet for boating. The cost versus benefit of this option should be carefully weighed as the amount of money and time to construct is not insignificant, and the majority of recorded boating incidents occur on the ebb shoal bar rather than in the throat of the inlet.
4. Widening/Deepening Alternatives 3, 4 & 5 – All three widening and deepening alternatives present varying degrees of difficulty in permitting. They also require a change to the existing bridge, removal and replacement of the southern bulkhead and jetty, and loss of County property. All three of these alternatives rank high in improvements to lagoon water quality and navigation safety, which satisfy the primary goals of this study. The overall effectiveness of these options are offset by the downsides in other potential environmental impacts, permitting, as well as costs and time required for construction.



CITY OF BOYNTON BEACH AGENDA ITEM REQUEST FORM

PROGRAM IMPACT: The non-structural alternatives were unanimously approved and can be undertaken at any time. They will require intergovernmental coordination and funding; potential funding sources may be identified, as well as stakeholders who may wish to participate. Structural alternatives are more complex and therefore no final recommendation could be made based on a single limited study. While some options were eliminated from consideration for various reasons, others emerged that could not be pursued in this context, specifically (1) bridge options (drawbridge, span, elimination) and (2) 50' widening but no deepening of the inlet. This study should be seen as the first phase of what would need to be a more in-depth evaluation by a broader base of stakeholders.

FISCAL IMPACT:

- #1. Estimated cost: 0
- #2. Estimated cost: \$2.18 million-\$3.9 million
- #3. Estimated cost: \$2,590,000
- #4. Estimated cost: \$8,865,000 [includes deepening]

ALTERNATIVES:

9.7 Non-Structural Alternatives

Non-structural alternatives listed earlier in this study include the following:

- Adverse Conditions Warning System;
- Additional Navigation Aides; and,
- Boater Education Programs.

Since these are not seen to have any adverse impacts, do not require permitting, and do not cost a great deal (relative to structural alternatives) they should be easy to implement and should be investigated further.

Periodic ebb shoal dredging is another non-structural alternative that is felt to have benefits to navigation safety and beach management. Because the County owns the surrounding property and manages the inlet and adjacent beaches, this option should be pursued further through appropriate County representatives (ERM and others). The best approach would be to incorporate the ebb shoal maintenance into the periodic beach nourishment program, accomplishing both an increase in safety and providing an additional source of beach sand outside of the dedicated offshore borrow site.



CITY OF BOYNTON BEACH AGENDA ITEM REQUEST FORM

Department Head's Signature

City Manager's Signature

Assistant to City Manager _____

Department Name

City Attorney / Finance