



*Florida Department of
Environmental Protection*

Offshore Sand Search Investigations and Borrow Area Design Guidelines

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Outline

- **Objective**
- **Five Principle Stages of an Offshore Sand Search**
- **Seven Tasks of the Offshore Sand Search Guidelines**
- **Conclusions**





Primary Objective

To establish technical recommendations of content, format, and quality of geologic information while providing maximum flexibility to modify an investigation as warranted by project-specific conditions.





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Principle Stages of an Offshore Sand Search

- 1) Office study and planning**
- 2) Reconnaissance level investigation**
- 3) Design level investigation**
- 4) Detailed characterization of specific borrow areas**
- 5) Compatibility analysis and final design**





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Seven Tasks of an Offshore Sand Search

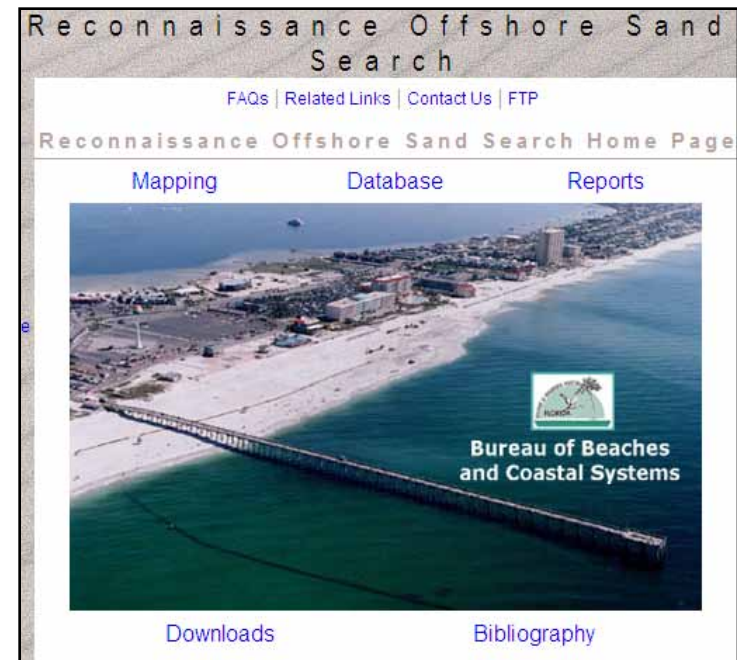
- I. Office study and planning**
- II. Reconnaissance-level field investigation**
- III. Design-level field investigation**
- IV. Compatibility analysis and borrow area design**
- V. ROSS/OSSI data**
- VI. Generation of a final report**
- VII. Deliverables**





I. Office Study and Planning

- **What are you looking for?**
- **What data already exists?**
- **What data are you going to collect?**
- **Where are you looking?**
- **Do you have a permit for that?**



<http://ross.urs-tally.com>



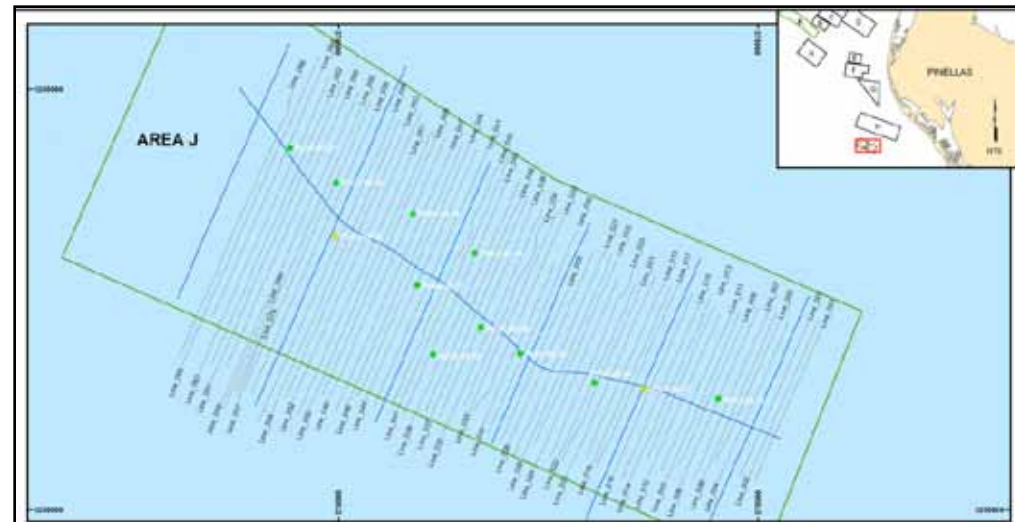
II. Reconnaissance-level Field Investigation

- **Seismic lines and vibracores**
 - ü **Understanding the general geomorphology and character of the targeted sedimentary feature**
- **Spacing of geophysical surveys**
 - ü **Guidelines of other resource agencies**
- **Vertical inaccuracies are cumulative!**



III. Design-level Field Investigation

- **Seismic data and vibrocores on a denser spacing.**
- **Sidescan sonar and magnetometer surveys as needed & on the appropriate spacing.**
- **Diver verification of magnetic anomalies is a key to maximizing the borrow area.**





IV. Compatibility Analysis & Borrow Area Design

- **To ensure that the borrow area material is similar to the recipient beach sediments and will maintain the environmental functions and character of the beach.**
- **Determinations of compatibility should take into account the environmental functions of the native material within the berm/ dry beach, mainly for turtle nesting.**





IV. Compatibility Analysis & Borrow Area Design

Final borrow area design should be prepared once the following concerns are met:

- ü **Sediment quality and compatibility.**
- ü **Cultural resource impact potential.**
- ü **Environmental and physical considerations of using the borrow area.**





V. ROSS/OSSI Data

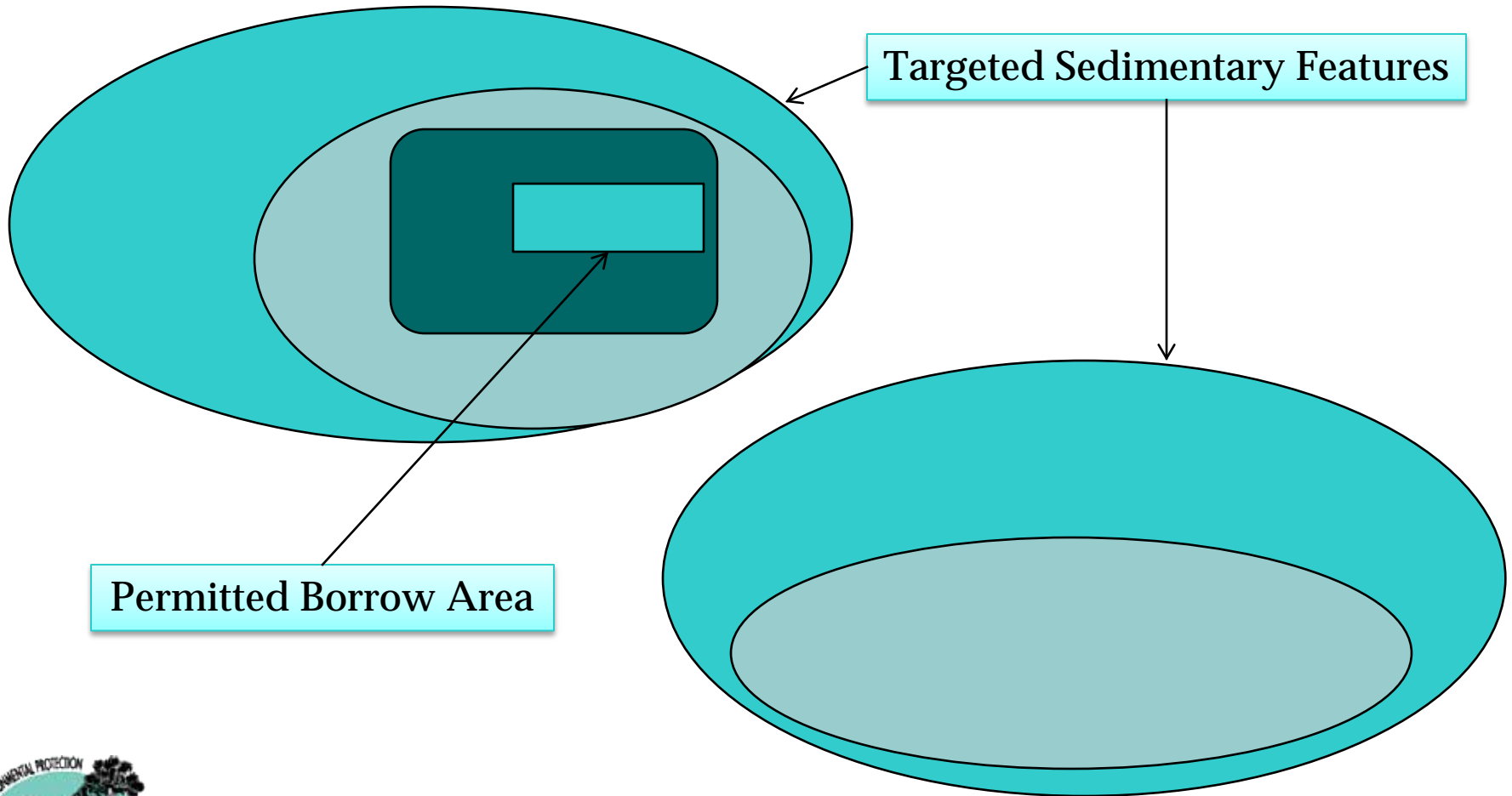
Updated ROSS/OSSI data should be submitted for the proposed borrow area and for the remaining potential areas identified and investigated during the sand search.

- ü As the borrow area designation changes, the composite sediment characteristics and volumetric data should be updated.**
- ü Potential, proposed, permitted, excluded for future use, and excluded from further investigation.**





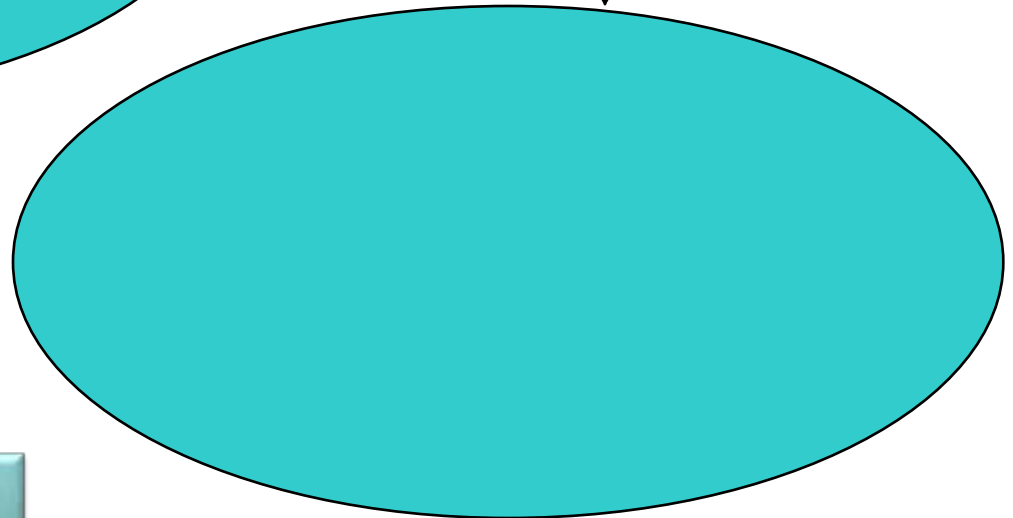
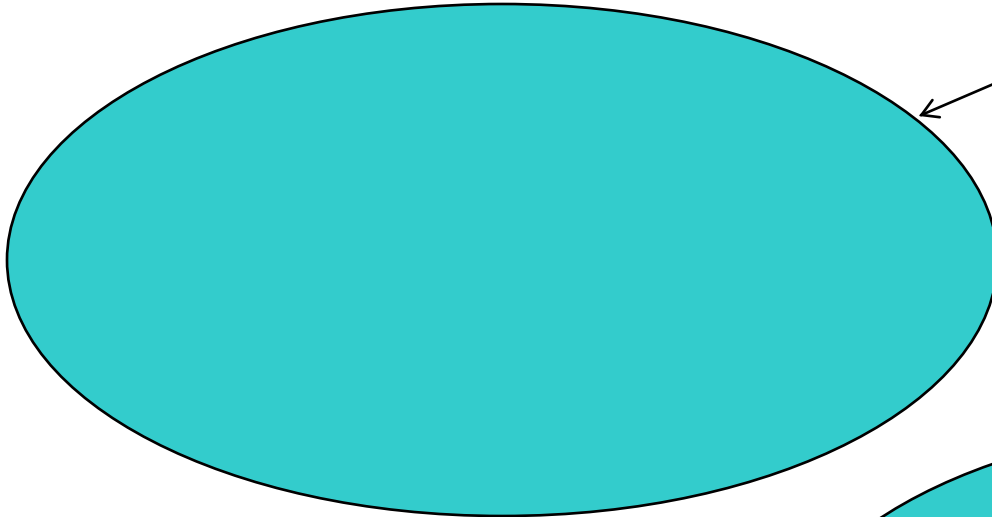
Changing Designation





Changing Designation

Targeted Sedimentary Features

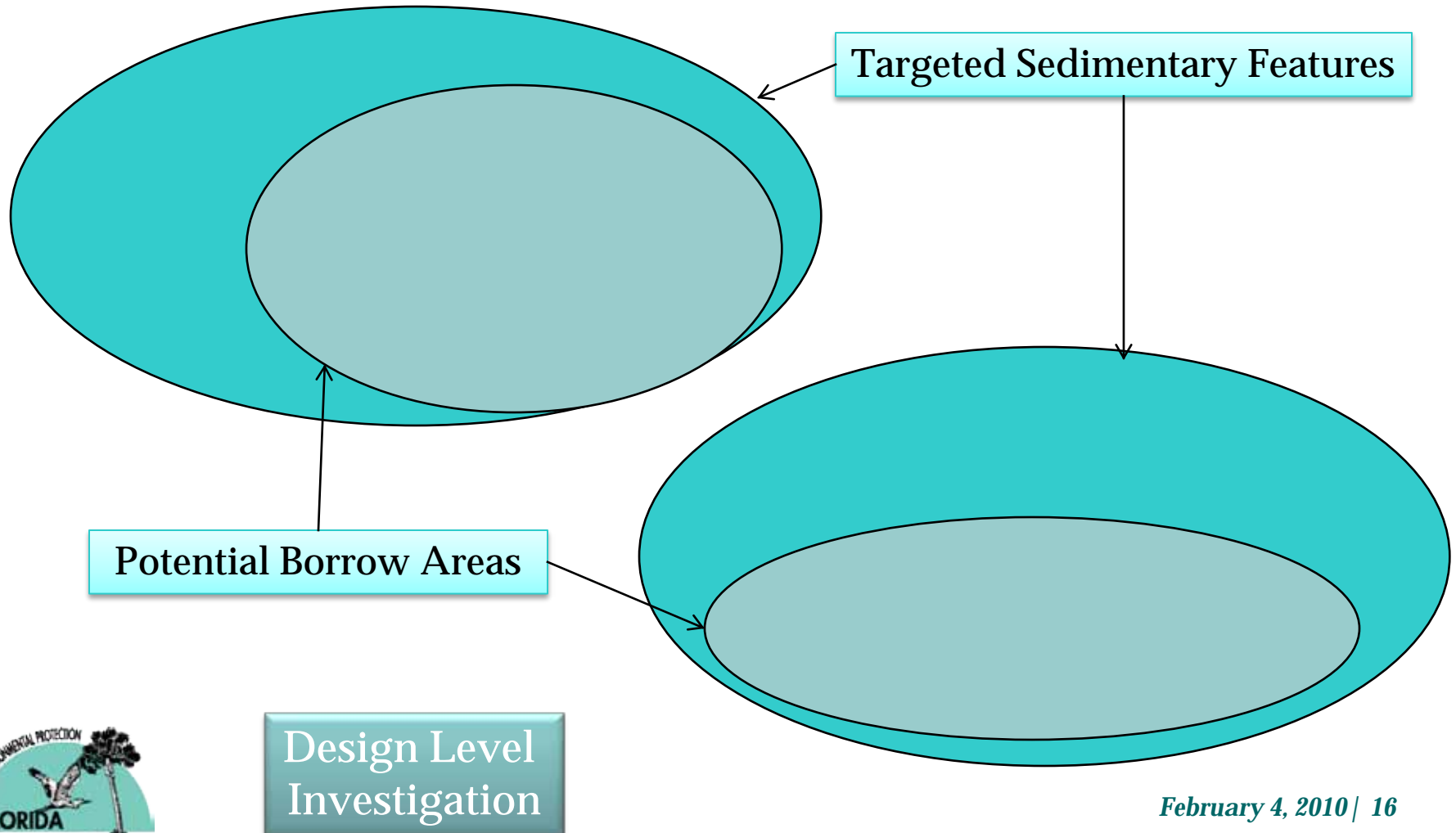


Reconnaissance Level
Investigation

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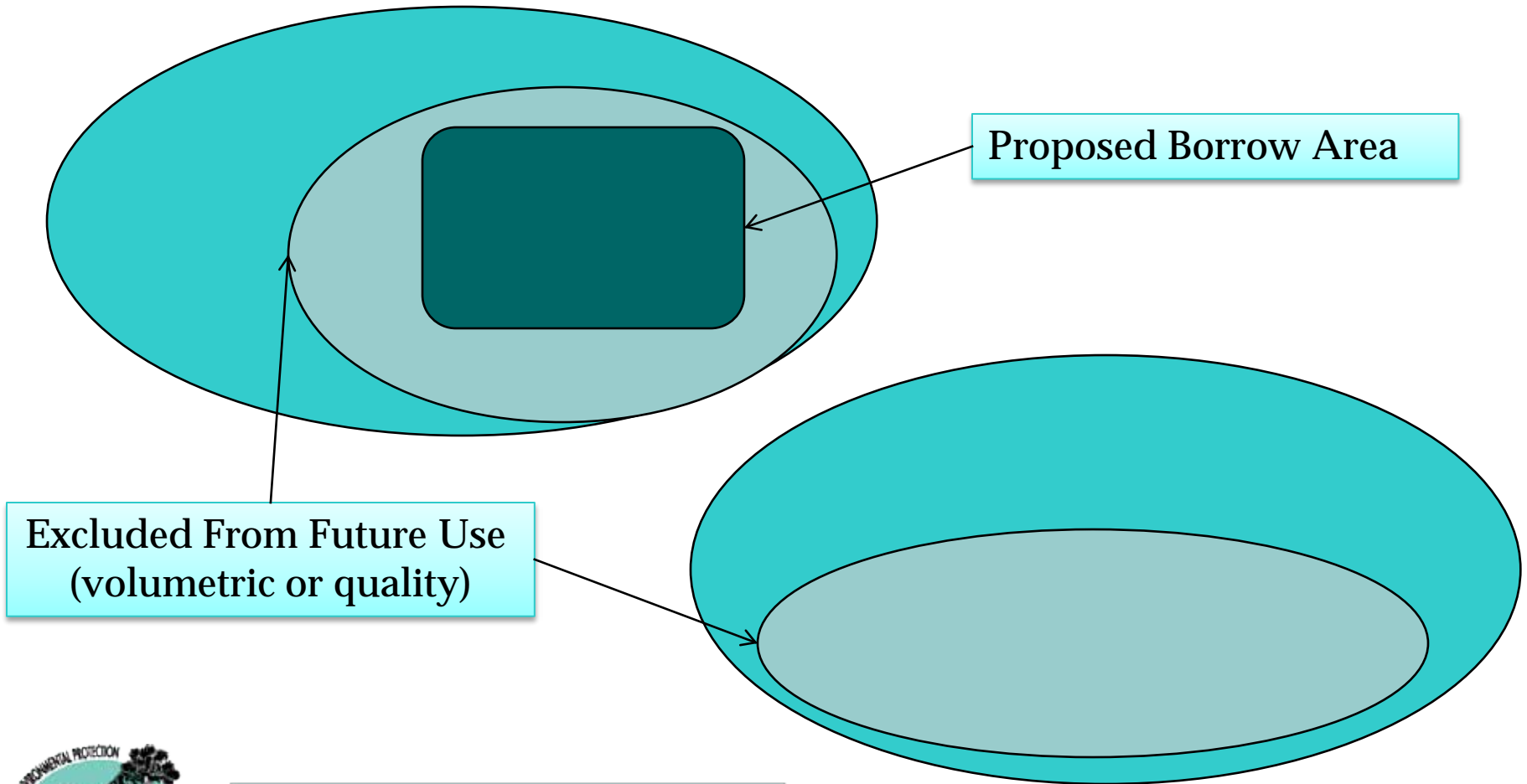


Changing Designation





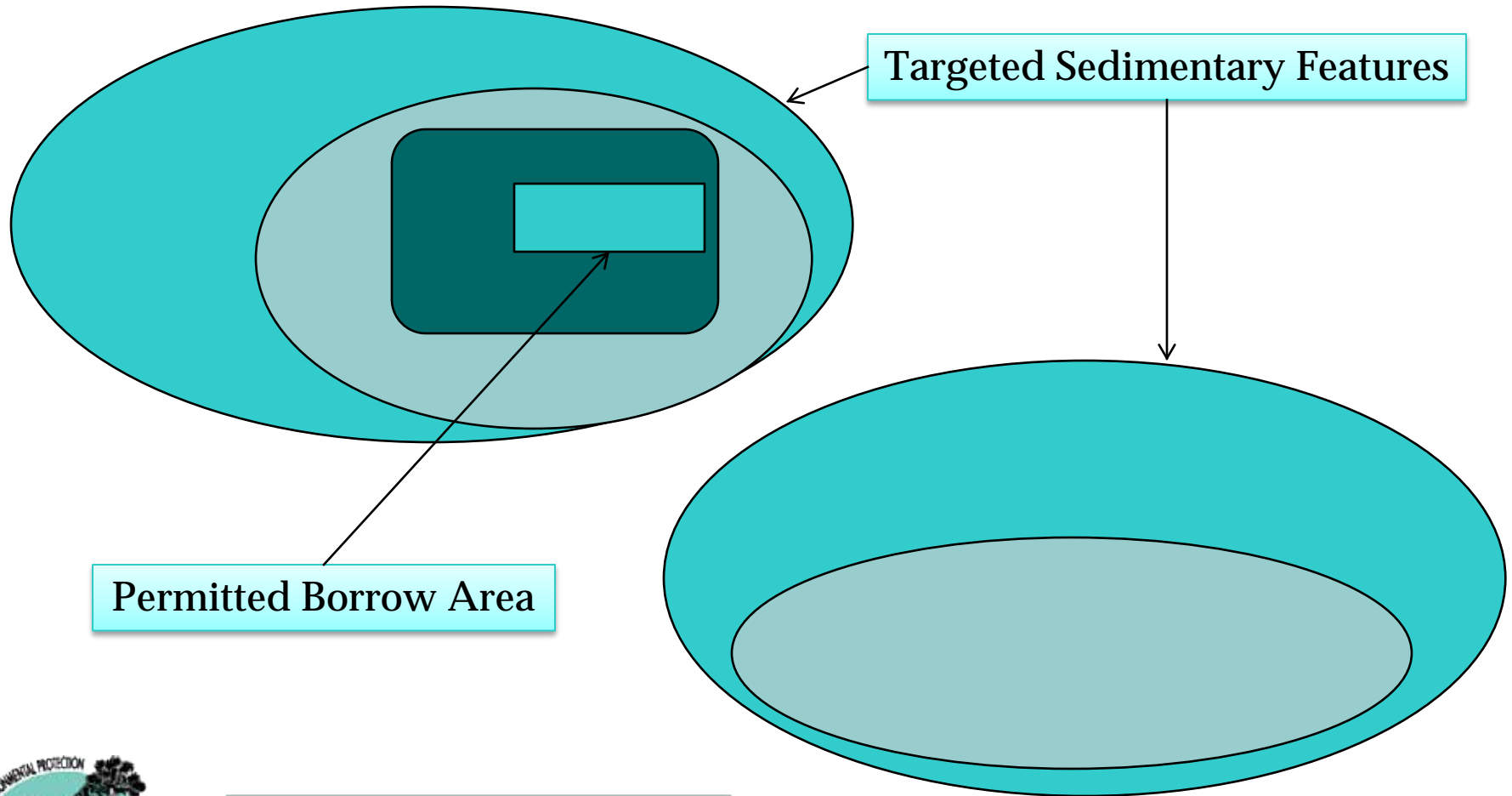
Changing Designation



Final Borrow Area Design



Changing Designation





VI. Generation of a final report

- **No more 1500 page reports!**
 - ü **Provide paper copy of maps, vibracore logs, and tabular summaries of sediment data.**
 - ü **Other data on CD/DVD!**
- **Tabbed/ Bookmarked pdf documents.**
- **More details in the guidelines.**





VI. Deliverables

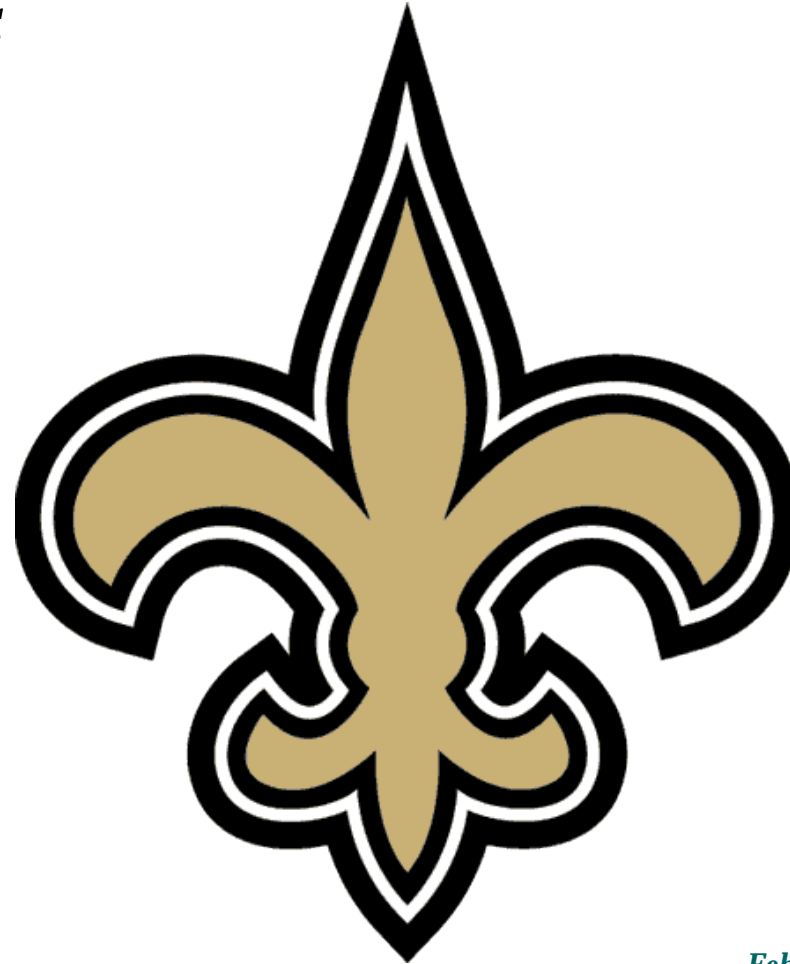
Details the format and content of the data that should be delivered to the Department following a sand search.





XLIV. Super Bowl

Geaux Saints





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Conclusion #1

When the guideline document is used appropriately, coastal engineering firms will be able to draft a Scope of Work, conduct an offshore investigation, and deliver a report with greater confidence that each element meets the expectations of the State.





Conclusion #2

This guideline does not constitute specific requirements of a sand search investigation. It recommends an overall process that provides the Department with reasonable assurance of the quality of the data received and standardizes the formats for deliverables and submittals.





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Offshore Sand Search Guidelines

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QUESTIONS?

