TECHNICAL MEMORANDUM

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TO:	Kate Zultner, Texas General Land Office
FROM	Dave Buzan, Freese and Nichols, Inc.
SUBJECT:	Technical Memo on recommendations for future management of the Resource Management Codes
PROJECT:	Work Order No. 8553, Under GLO Contract No. 13-333-003 to Atkins North America
DATE:	January 19, 2015
CC:	Elizabeth Vargas, General Land Office; Luke LeBas, Atkins

GLO RESOURCE MANAGEMENT CODES FUTURE RECOMMENDATIONS

Resource Management Codes (RMC) inform users of state-owned submerged lands about ecological features associated with lease tracts which may affect a lessee's ability to engage in certain activities on those tracts. The Texas General Land Office (GLO) with support from Harte Research Institute, other state and federal agencies, Atkins North America, and Freese and Nichols, Inc., thoroughly analyzed RMCs, their definitions, relevant data availability, and created new, improved ways of updating the codes. The Resource Management Code Viewer, now online, was created, providing users a much more effective method of accessing codes and associated information. The Viewer also lays the foundation for future, more efficient, cost/effective methods of updating code information. Following are recommendations to the GLO as it maintains and revises the RMCs in the future.

i. **Initiate an on-going state-wide discussion about coastal databases which generate data about sensitive areas along the coast.** Example: Texas Parks and Wildlife Department's (TPWD) Seagrass viewer. It is expected that GLO staff would manage this process.

ii. Goals:

iii. Describe recent changes to databases,

iv. Identify new sources of data,

v. Collaborate on data sharing, and

vi. Compile information expected to facilitate the next update of the RMCs, definitions, and sensitive areas.

vii. Meet annually. Meeting at least annually is critical to maintaining effective communication and working relationships.

viii. Participants would include all the state and federal agencies you invited to participate in the 2014 update of the RMCs.

ix. Ecologist, biologists, and coastal scientists who would be familiar with sensitive areas and impacts they experience.

x. Data managers from GLO and other agencies (ex. Kim Ludeke with TPWD)

xi. Update RMCs and Viewer.

xii. Purpose: Ensure the RMCs, RMC Viewer, and associated information are helpful and current.

xiii. Once every five years, conduct regular meetings to gather knowledge gained since the prior revision of the RMCs and incorporate the new information into the system. The process would emulate the 2014 revision effort.

xiv. Survey state-tract lease holders to find out how they used the RMCs, whether or not the RMCs were helpful, and how they would suggest modifying the RMC system to increase its usefulness. This survey could best be done by phone interview rather than developing and using a printed or online survey.

xv. Incorporate the most recent data and the most recent technological advances into the revision. New databases would be identified and utilized.

xvi. The GLO hired Harte Research Institute to help facilitate the 2014 process. The GLO should continue with this course of action and hire a consultant to facilitate the next revision of the RMC system.

xvii. The GLO also hired a consultant who worked on establishing the first version of the RMCs to participate in the 2014 process. A major benefit of hiring a consultant with RMC familiarity is the ability to provide historical knowledge and a different perspective to the meeting discussions and assignments.

General Comments:

The 2014 RMC revision effort revealed the large number of automated data sets developed since the previous revision. It also revealed new advances in mapping and online use of mapping tools. RMC revision is not a stand-alone process but is linked with the growing number of databases and amount of ecological information being collected. This is a conceptual, dynamic linkage.

We do not recommend putting effort into developing a single database or database structure which all databases created by different agencies would use. Databases will be established and maintained for specific purposes by different agencies, i.e. to map locations of seagrass in Texas estuaries.

Annual meetings will naturally engage scientists and data managers in the process of looking for similarities in data management, particularly those facilitating data sharing. The annual meetings will also broaden interest in automating data as agencies see the potential use of their data in RMCs. The most important product of the annual meetings and five-year revision cycle may be encouraging and enhancing collection and management of ecological data. This broader outcome will provide greater benefits to the state than will the RMC code revisions alone.