

Flower Garden Banks NMS **Boundary Expansion Process**

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Flower Garden Banks National Marine Sanctuary Advisory Council

Presentation to
Beyond the Horizon Conference
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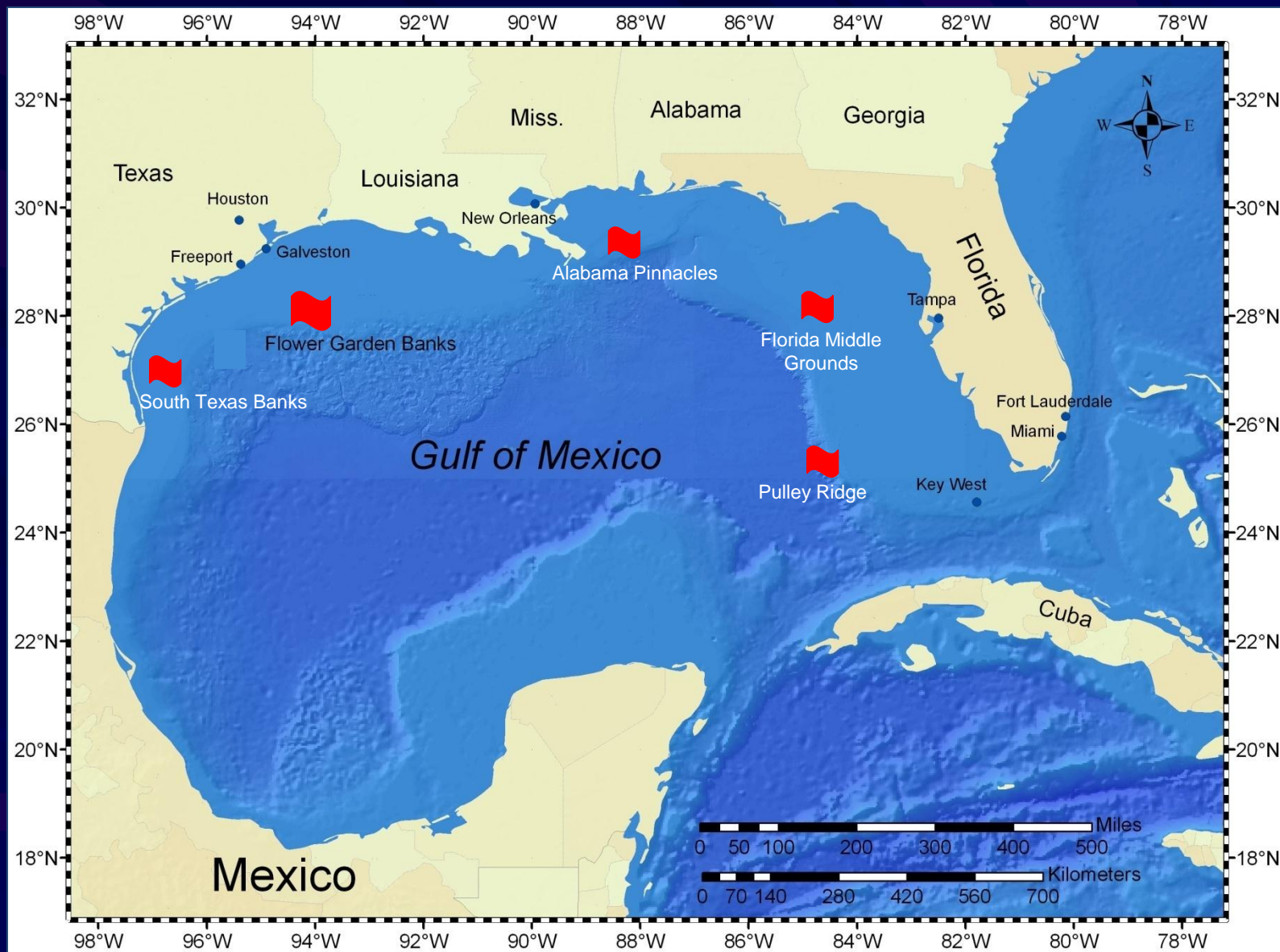
Flower Garden Banks National Marine Sanctuary

- Designated in 1992
- Includes: East and West Flower Garden and Stetson Banks
- Stetson Bank added in 1996
- Located 93 to 104 nautical miles offshore in the GOM
- Area: 42.5 square nautical miles (56 square statute miles)
- Water Depth: 55' to 500'

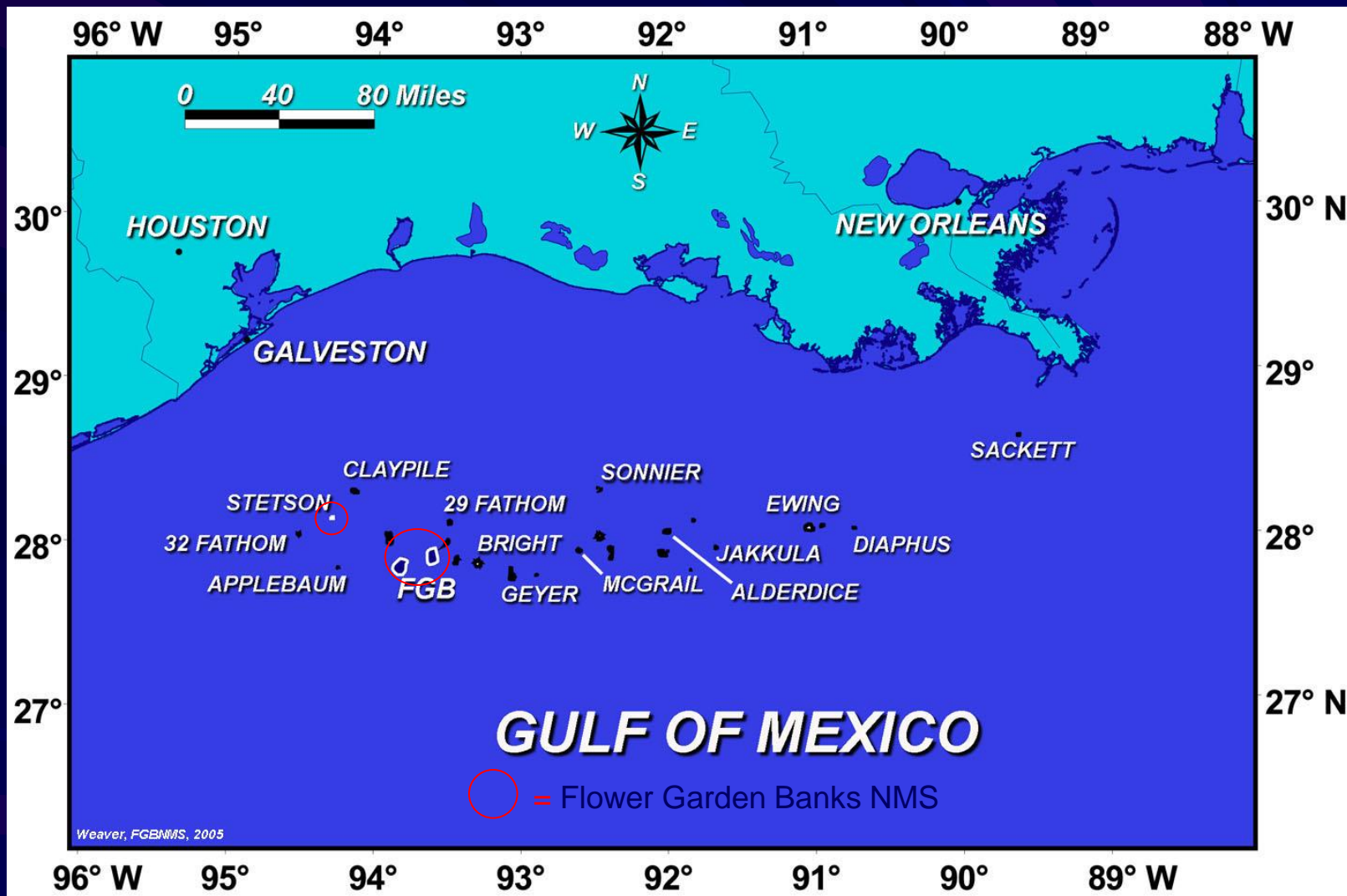
Boundary Expansion Working Group

- The FGBNMS Advisory Council formed a Boundary Expansion Working Group in late 2006 to evaluate other habitats and topographic features within the Gulf of Mexico for potential inclusion under the management and protections of the FGBNMS.
- Areas to be considered included the Stetson Bank Ring, habitats between and adjacent to East and West Flower Garden Banks, and the other northern Gulf of Mexico banks.
- The working group developed a set of seven (7) alternatives for potential boundary expansion.
- The FGBNMS Advisory Council considered the working group recommendation at SAC meetings held on 9/27/07 and again on 12/6/07.
- On 12/6/07, the Council made a final recommendation to sanctuary management and NOAA. The Council recommended alternative 5 as the preferred alternative, with boundaries based on the sensitive habitat zone/core biological zone, but with an additional 500 meter buffer.

Major Bank Areas in the Northern Gulf of Mexico



25+ Banks on the Outer Shelf & Upper Slope

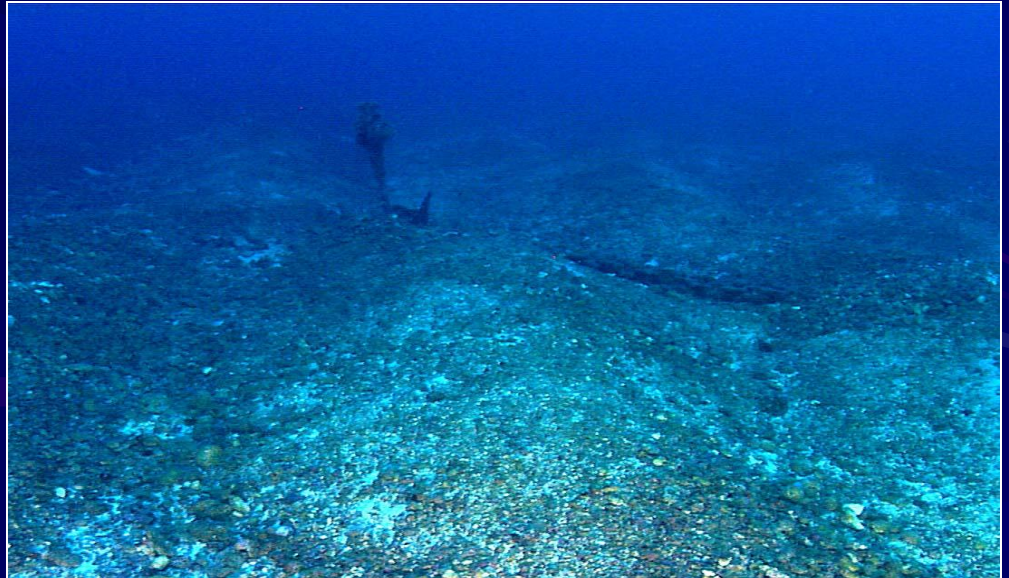


Threats

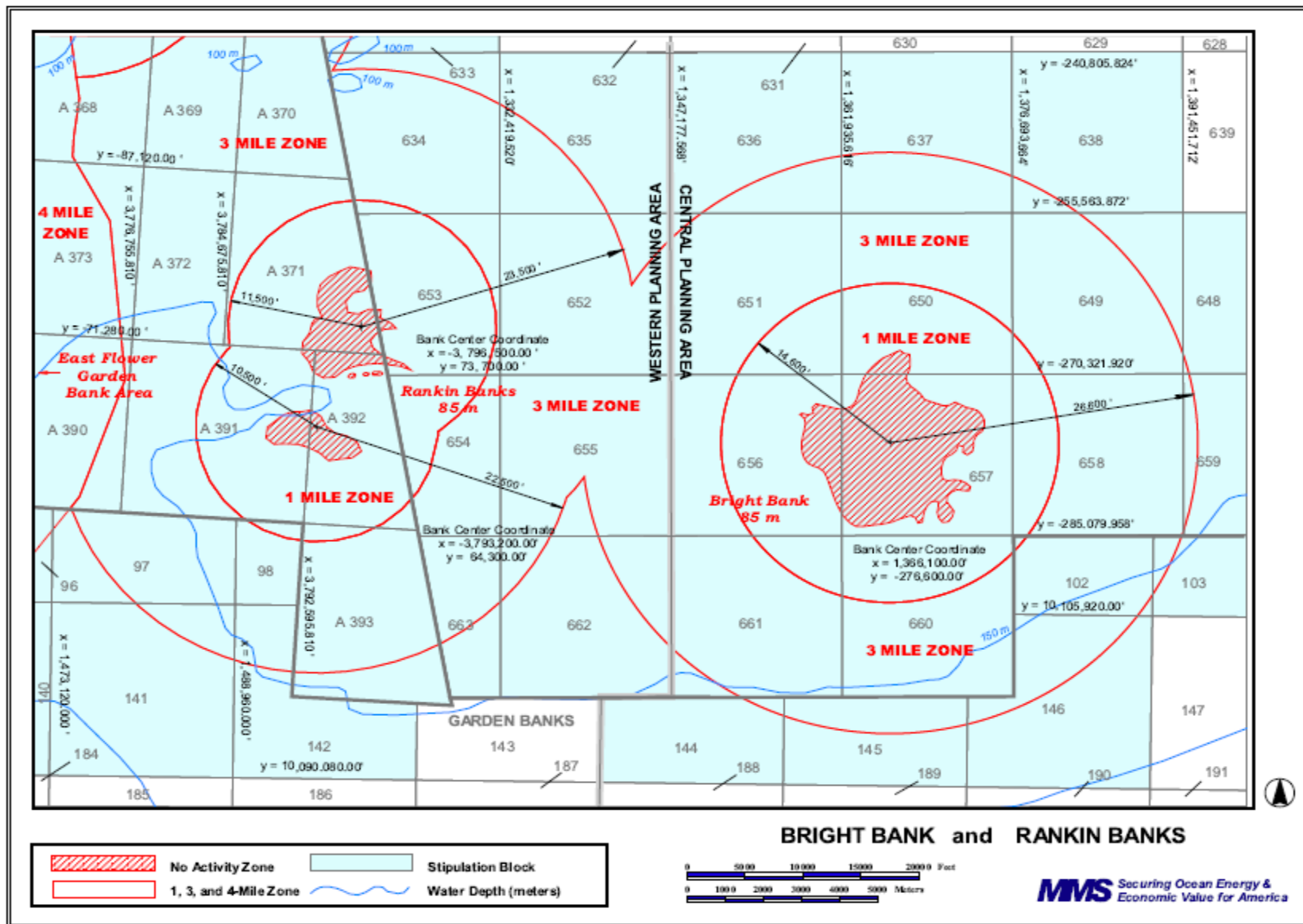


**Treasure Hunter
Excavation**

Anchor Damage



BOEMRE "No Activity Zones" & "Stipulation Areas"



Ranking Criteria

Legend

Area or Bank	Area considered for incorporation into the FGBNMS
Zone Priority Index	Biological/Geological Significance/Uniqueness based on MMS criteria and FGBNMS recent acquisition of data
Connectivity Index	Connectivity to current FGBNMS features
Threat Index	Level of known or perceived threat
Public and Sanctuary priority	Level of interest through public scoping and sanctuary knowledge to incorporate site.

Zone Priority Index	High - 3
(Biological/Geological Significance)	Med - 2
	Low - 1

Threat index	High - 3
	Med - 2
	Low - 1

Structural	Contiguous - 3
Connectivity	Connected - 2
	In geographic region - 1

Biological Connectivity	
0-10 km	3
11-20 km	2
21-30 km	1

Public and Sanctuary Priority Index	High - 3
(level of interest to incorporate site)	Med - 2
	Low - 1

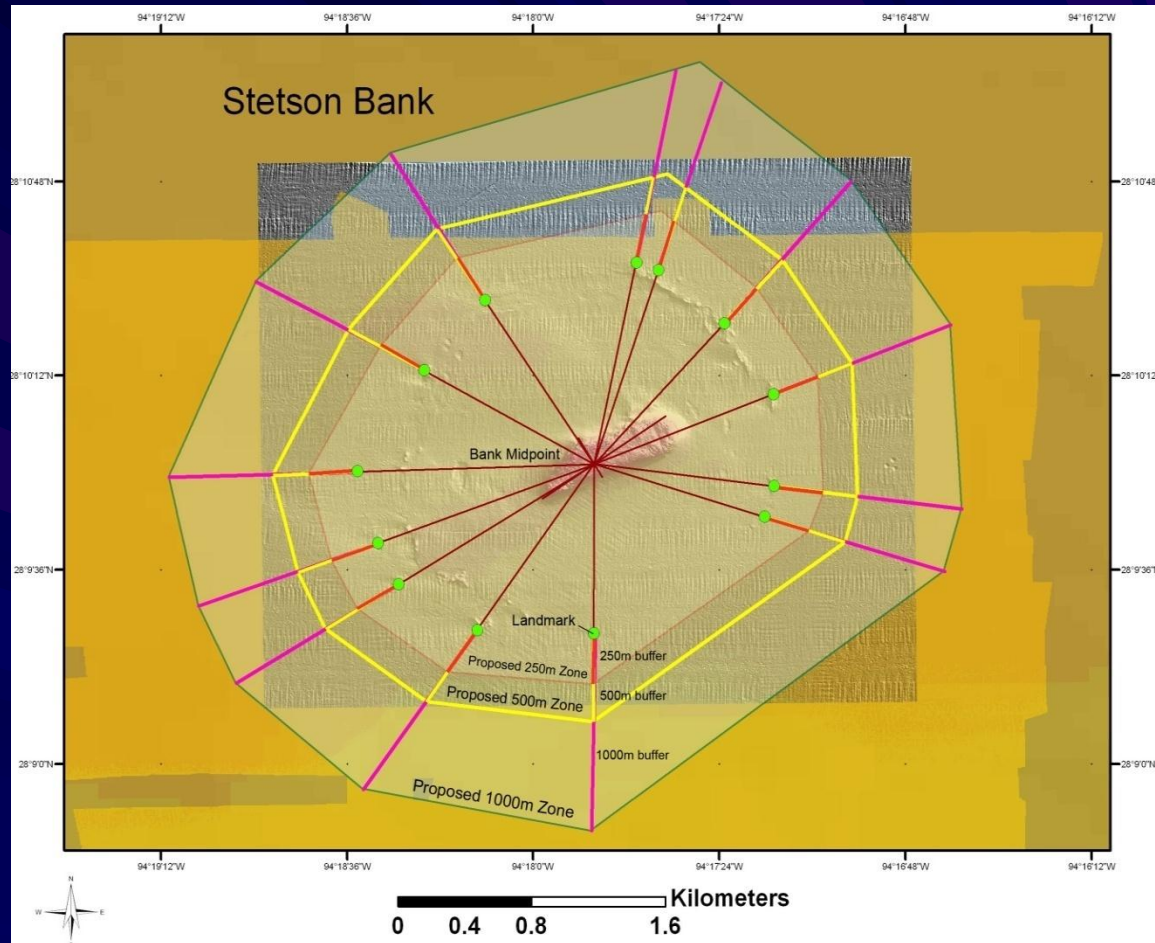
Criteria Matrix

Area or Bank	Zone Priority Index	Structural Connectivity Index	Biological Connectivity	Threat Index	Public and Sanctuary priority	Overall ranking	Nearest Neighbor Distance (km)
Stetson Ring	3	3	3	3	3	12	23.3
McGrail	3	1	2	3	3	11	15.8
Geyer	3	1	2	3	3	11	18.25
Bright	3	2	2	3	3	11	14.8
Sonnier	3	1	1	3	3	10	29.8
"Horseshoe reef"	2	2	3	2	3	10	9.5
Alderdice	3	1	2	2	2.5	9.5	15.7
Rezak	1	1	3	1	2	7	5.9
Sidner	1	1	3	1	2	7	5.9
Rankin	1	2	3	1	1	6	3.4
28 Fathom	1	2	3	1	1	6	3.4
MacNeil	1	2	3	1	1	6	8.5
Bouma	1	1	2	1	1	5	11
Jakkula	1	1	1	1	1	4	23.1
Florida Middle Grounds	2	0	0	2	0	4	115
Alabama Pinnacles	1	0	0	1	0	2	219
Madison/Swanson	1	0	0	1	0	2	115

Boundary Selection Criteria

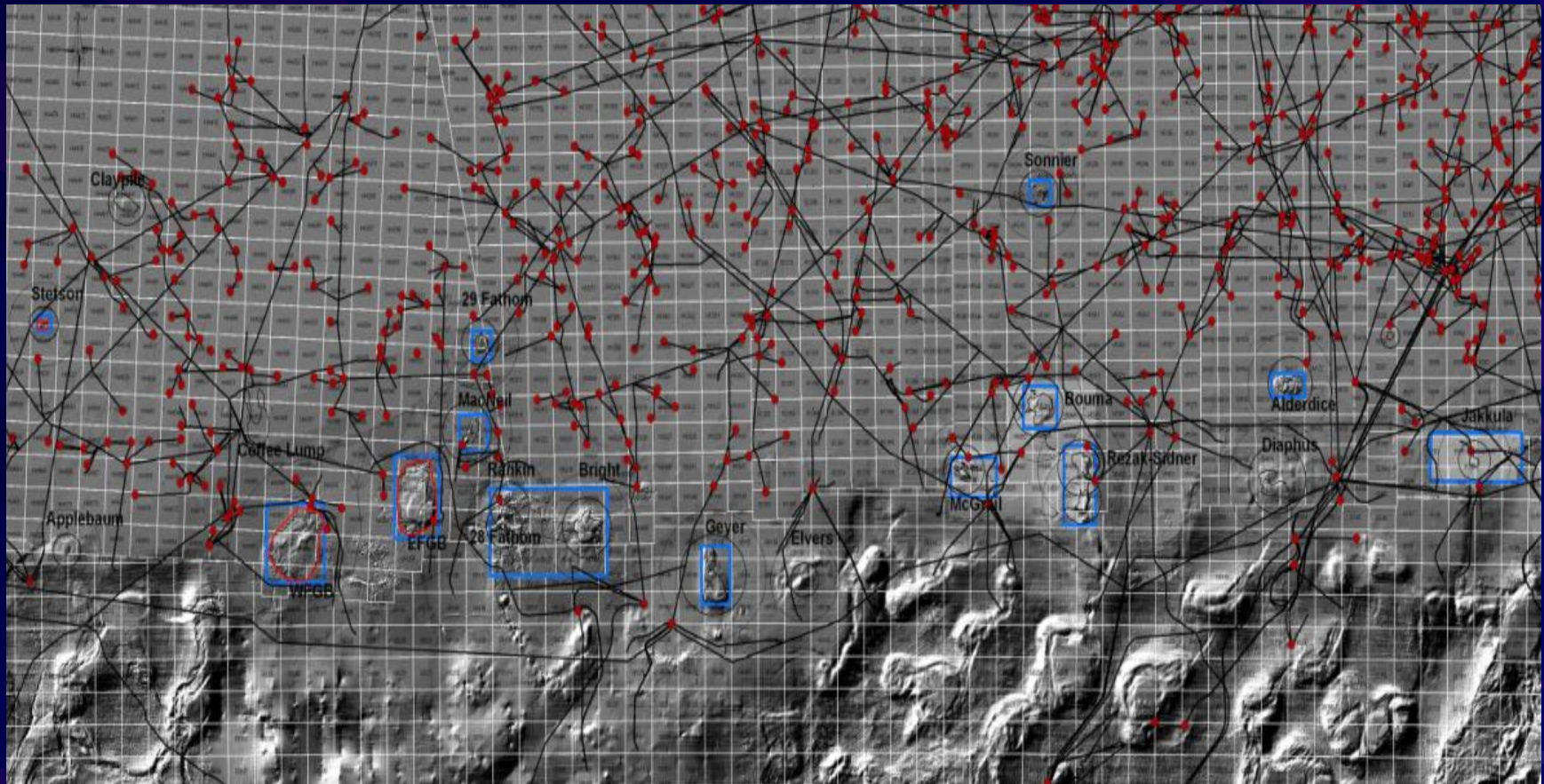
Based on:

- *Ground-truthing using ROV's and submersibles*
- *Prominent features defined as topography greater than 3m in vertical relief and 25m in diameter.*
- *Boundary of core biological zones developed by identifying prominent features, forming the vertices of an irregular polygon.*
- *Buffer zones developed from the outer landmarks of the core polygon, radiating from an approximate midpoint of the bank*



**Working Group assessed:
250m, 500m, and 1000m buffers.
Proposed 500m buffer.**

Extensive Oil & Gas Infrastructure



Factoring Impacts

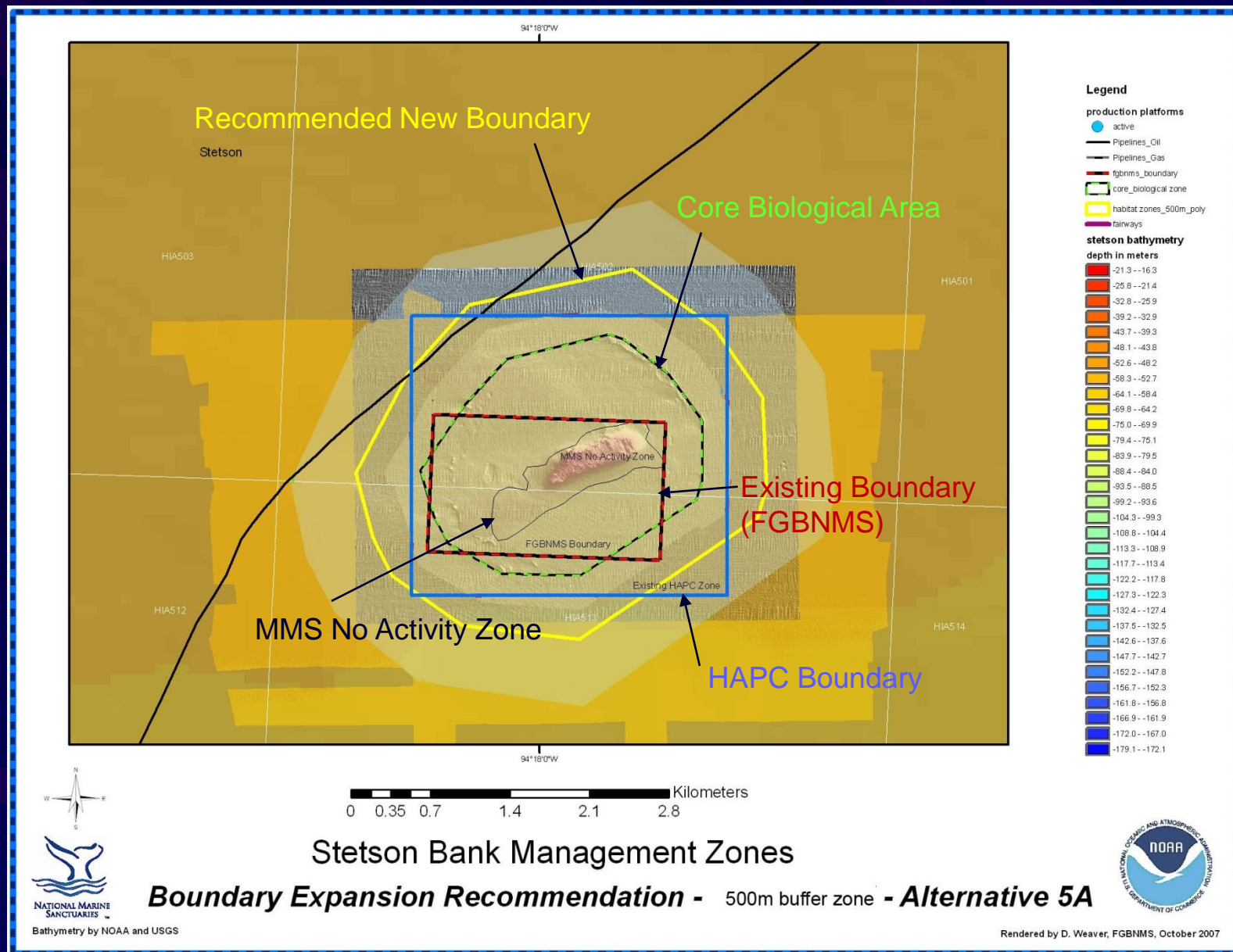
Square HAPC
Boundaries

=

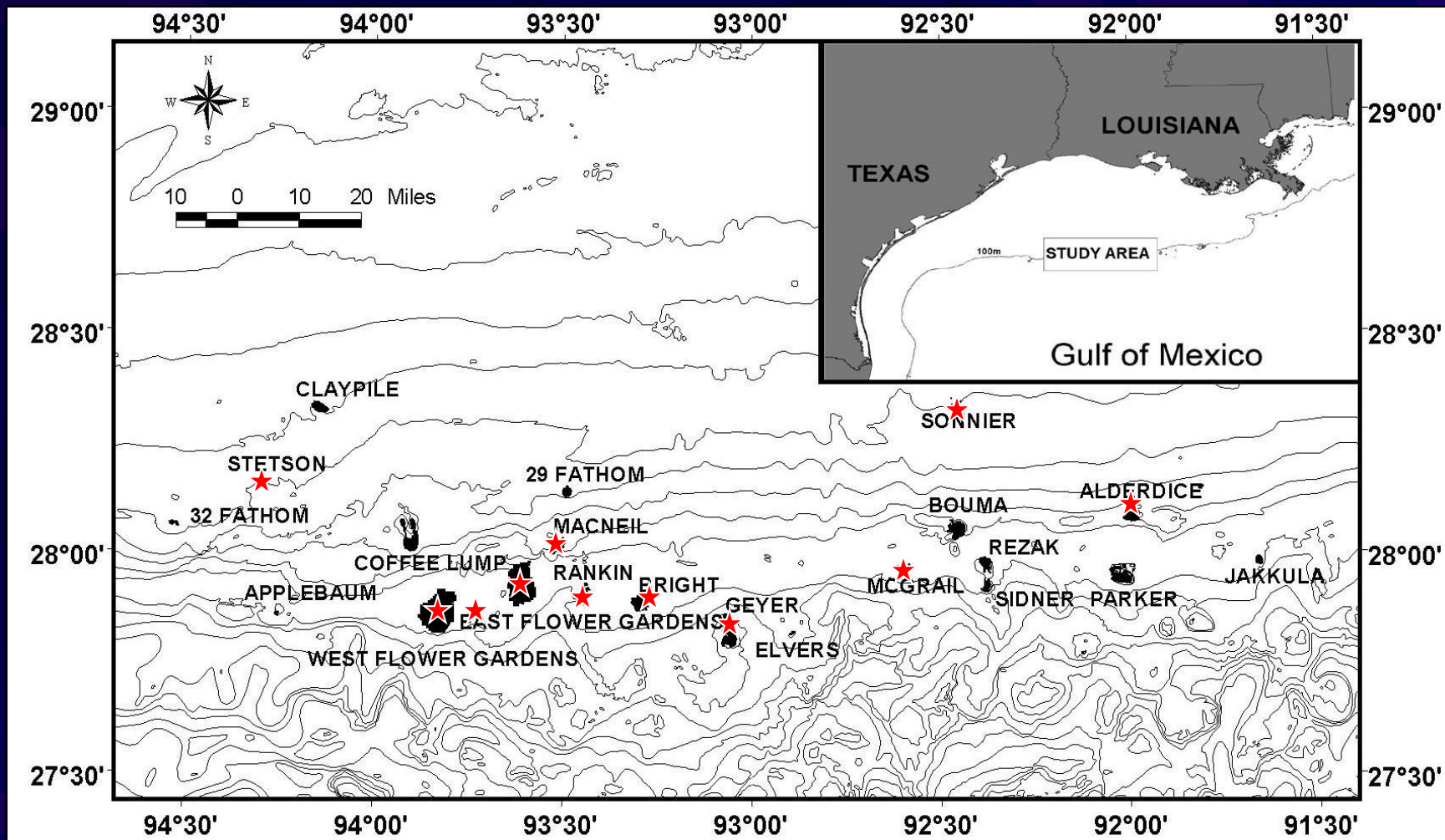
Many more



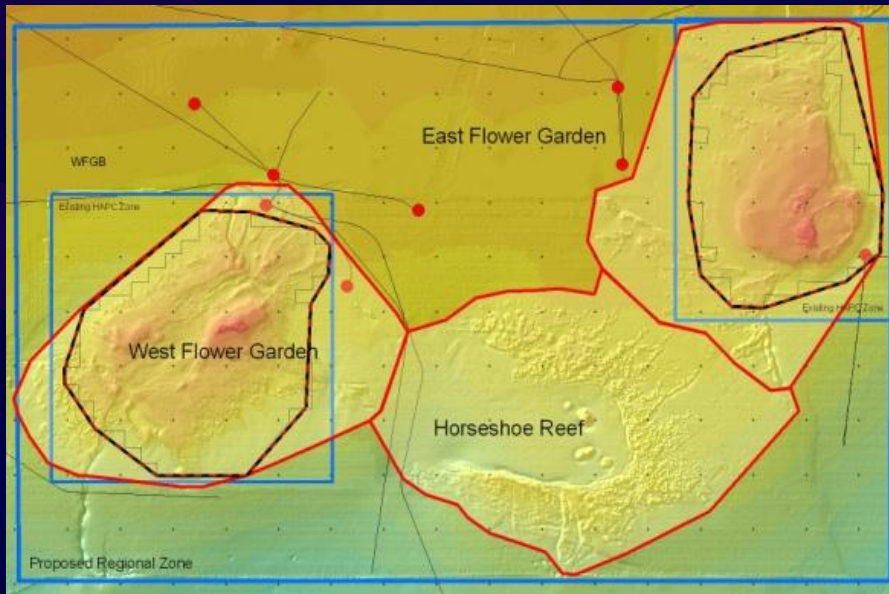
Example Boundary Line Key - Applies to All Maps



ALTERNATIVE 5 – FGBNMS Advisory Council Recommendation

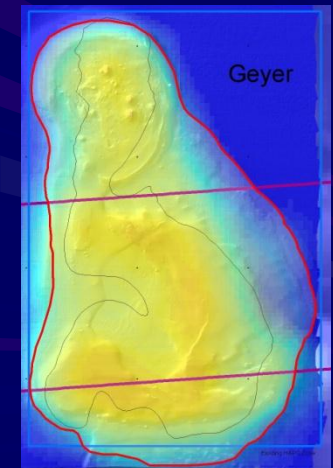
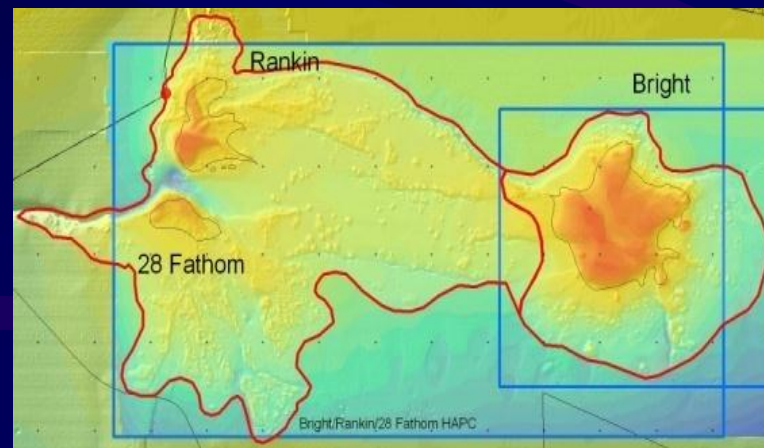
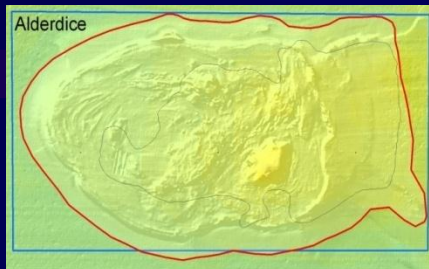
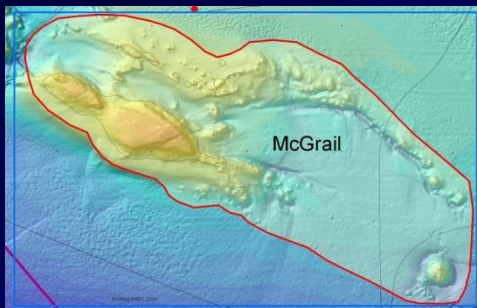
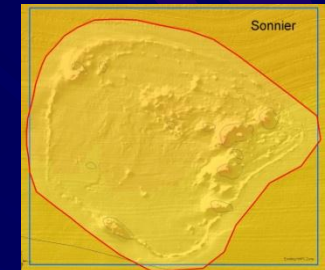
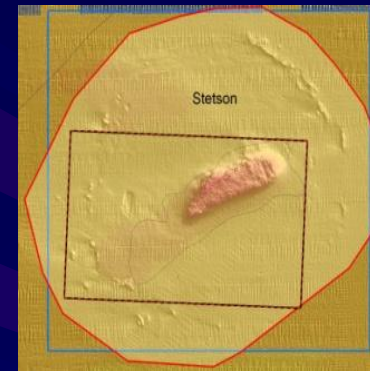


FGBNMS SAC ALTERNATIVE #5 – 500% Expansion



Current 3 Bank Area – 35,973 acres
Portions of 17 blocks – 56 sq. smi.

Proposed 11 Bank Area – 179, 866 acres
Portions of 65+ blocks – 281 sq. smi.



(maps not all same scale)

Cooperative Relationship within Working Group

- **Identified & embraced common goals**
- **Facilitated each others efforts**
- **Face-to-face interaction**
- **Exchanged resources**
- **Carefully & respectfully questioned reasoning and conclusions**
- **Balance and Stewardship**

“ENLIBRA”

A SHARED DOCTRINE FOR ENVIRONMENTAL MANAGEMENT

ENLIBRA = “Balance and Stewardship”

A Balanced Approach to Successful Environmental Management

HISTORY: Utah Governor Mike Leavitt (R) and Oregon Governor John Kitzhaber (D) took the lead in developing this shared set of principles that were agreed upon in 1999, as policy of the Western Governors’ Association. Western states’ land use conflicts were very contentious.

PURPOSE: Today there is no symbol for the middle; for the majority of citizens who believe that the environment and its natural resources can be protected while at the same time providing recreational and employment opportunities. This doctrine provides a collection of tools that, if applied, can result in improved and expedited environmental decision-making and implementation.

(adapted from WGA 1999)

“ENLIBRA” Principles:

- 1. National Standards - Neighborhood Solutions**
- 2. Collaboration - Not Polarization**
- 3. Reward Results & Innovation - Not Programs**
- 4. Science for Facts - Process for Priorities**
- 5. Markets Before Mandates**
- 6. Change a Heart - Change a Nation**
- 7. Recognition of Costs and Benefits**
- 8. Solutions Transcend Political Boundaries**

THE WESTERN GOVERNORS’ HOPE OF “ENLIBRA” BECOMING:

- 1. A symbol for balance and stewardship in environmental management**
- 2. A widely used framework for solving difficult environmental problems**
- 3. A philosophic foundation for balanced environmental legislation**
- 4. A road map for discussions between regulators and stakeholders**

(adapted from WGA 1999)

Acknowledgements

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FGBNMS Staff

FGBNMS Advisory Council

FGBNMS Boundary Expansion Working Group

Dan Basta, Billy Causey, Steve Gittings

Thank You!



(Ascending from the “abyss” of Bright Bank’s dynamite-blasted mining pits at about 120’+)