

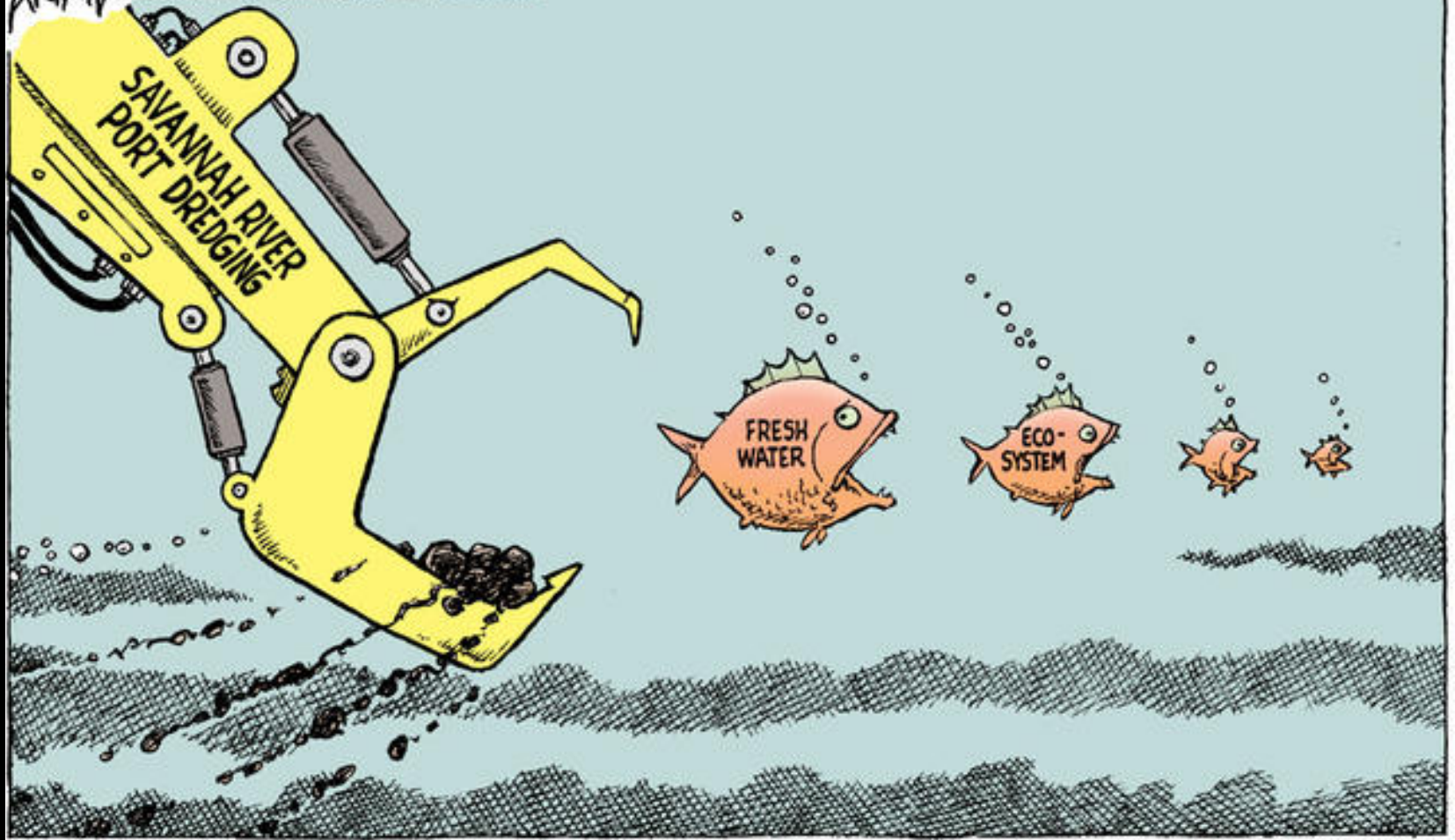
Some Thoughts on Dredging and Marine Spatial Planning, the Southern California Bight & The Aquarium of the Pacific

Western Dredging Association—Pacific Chapter

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Aquarium of the Pacific



Dread = anticipate with great
apprehension or fear.



>95%, by weight, of all
international cargo
moves by ship











22 million people ride the Staten Island Ferry every year

2.1 billion people and 285 million vehicles ride ferries every year



Cruise Ships = A Growing Business, 14 million passengers in 2010





U.S. Commercial Fishers Landed 9.9 billion pounds of seafood valued at \$5.3 billion in 2011. They use boats!



More than 10 million recreational salt water anglers
in the U.S. in 2011



There are an estimated 17 million recreational craft of all kinds in the U.S.



The Challenge: Ensuring The Uninterrupted Movement of

- Goods
- People (business)
- Seafood
- People (recreation)

The infrastructure to support these activities & services requires periodic maintenance dredging, and also new work.

“Once on the water, boaters rely on clearly marked, maintained, and dredged channels, along with accurate, updated, and available charts.”

NOAA/NOS









Dredging Windows

- First environmental windows more than 35 years ago.
- Today more than 80% of all federal dredging projects have windows.

Can We Bring More Rationality
to Our Management of the
Coastal Ocean?

*CMSP is a way to manage
competition for space in the
ocean (and the Great Lakes) to
achieve societal priorities...
and at the top...*

One Definition of CMSP

- “CMSP is a comprehensive, adaptive, integrated, ecosystem-based, and transparent spatial planning process, based on sound science, for analyzing current and anticipated uses of ocean, coastal, and Great Lakes areas.”
(Interagency Ocean Policy Task Force, Dec. 9, 2009—CEQ).

Recent History of MSP in the U.S.

- **June 2009**, Pres. Obama directed 22 Federal Agencies to develop “a framework for effective coastal and marine spatial planning.”
- **July 2010**, Pres. Obama signed Executive Order 13547 adopting the Ocean Policy Task Force’s report. CMSP is the process identified to achieve the goals.
- National Ocean Council + Associated Committees + Regional Planning Bodies constitute the Governance Structure.

Coastal & Marine Spatial Planning (CMSP) in the Southern California Bight



Some Conclusions & Recommendations from a Forum co-Sponsored by the Aquarium of the Pacific Marine Conservation Research Institute (MCRI), University of Southern California Wrigley Institute, and the USC Sea Grant Program

On July 26-27, 2011 about 40 people met to explore how Coastal Marine Spatial Planning (CMSP) could be used in the Southern California Bight to benefit the environment and the economy. The forum was convened by the Aquarium of the Pacific, the University of Southern California's Wrigley Institute, and the USC Sea Grant Program. The forum was supported by the Ralph and Hazel Osborn and Lois J. Roark Charitable Trust. The participants included scientists, engineers, policy-makers, environmentalists, marine educators, and representatives of various offshore industries¹.

This is a brief summary of the major findings, conclusions and recommendations

of the forum. These are consensus views and do not imply that everyone agreed with everything stated in this brief report. The forum was intended to move discussion of CMSP from the abstract to application and to make the case that the Southern California Bight would be an ideal laboratory for applying, testing and refining the CMSP process.

At the beginning of the forum, Charles N. (Bud) Ehler presented an overview of CMSP. Much of the following section is based on his presentation.



The Southern California Bight.

1. The participants and their affiliations are listed on the Aquarium's website www.aquariumofthepacific.org. A more comprehensive summary of the forum will be posted on this site by November 30, 2011.

A BRIEF TUTORIAL ON COASTAL AND MARINE SPATIAL PLANNING (CMSP)

In its simplest terms, Coastal and Marine Spatial Planning is a process for bringing order to an increasingly crowded coastal ocean by allocating spaces to important uses by humans to reduce conflicts with other human uses and with nature to achieve environmental, economic, and social benefits on a sustainable basis. CMSP does not replace single sector planning and management, but looks across all sectors to reduce conflicts and enhance benefits to the environment and society. There are numerous definitions of CMSP, but all share many features in common.

The definition proposed by the Ocean Protection Council in OPC 2010z.10.26 (in Nov 2010 CMSP Workplan Memo) is

Coastal and Marine spatial planning is a comprehensive, adaptive, integrated, ecosystem-based, and transparent planning process. It is based on sound science and integrates ecological, economic, and social information on current and projected uses of marine waters to inform management and regulatory decisions, reduce conflicts, and facilitate compatibility

among projected uses, while sustaining the State's marine ecosystem and resources for present as well as future generations.

A simpler, more elegant definition was offered by Ehler and Douevre. Marine Spatial Planning is...

"The public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process." (loc. unesco.org/marinesp)

CMSP is a process. In virtually all of the definitions it is described as a process that should be open, inclusive, transparent, future-oriented, ecosystem-based, place-based, and integrated across sectors. It also is to be an iterative, on-going process. While planning is at the core, a successful CMSP process includes not only planning, but implementation, enforcement, monitoring, evaluation, and adaptation based upon new data and information to achieve goals and objectives. It might more appropriately have been called "Coastal and Marine Spatial

Management." Processes should be judged by the outputs and the outcomes they produce, not by the beauty of the process.

A brief recent History of CMSP in the U.S.

- June 2009: President Obama directed 22 Federal Agencies to develop "a framework for effective coastal and marine spatial planning."
- July 2010: President Obama signed Executive Order 13547 adopting the Ocean Policy Task Force's report defining a National Ocean Policy that prioritizes the protection, maintenance and restoration of ecosystem health and sustainable economic development of our coastal and ocean economies. CMSP is the process identified to achieve the goals.

Marine Spatial Planning has been done in Europe and Australia for decades. The "C"—Coastal—was added in the U.S. to accommodate the interests of coastal states, including those around the Great Lakes.



IF THE CORPS OF ENGINEERS
DOESN'T DREDGE THE
TURNING BASIN SOON,
WE HAVE PREPARED SOME
ALTERNATE PLANS.

1. HOLD BEACH VOLLEYBALL TOURNAMENTS.
2. HOST AN INTERNATIONAL SAND CASTLE COMPETITION.
3. PAVE IT OVER AND GIVE THE DOWNTOWN MERCHANTS MUCH-NEEDED PARKING.

PETALUMA
RIVER
TURNING BASIN



MISS PETALUMA

LOOKS LIKE WE HAVE A
SLOUGH OF OPTIONS

GRAND

[HTTP://STEVE-RUSTAD.PETALUMA360.COM](http://STEVE-RUSTAD.PETALUMA360.COM)

I CAN'T
STOP
THINKING!!



SOUTHERN CALIFORNIA BIGHT

Point Conception

Santa Barbara

San Miguel

Santa Cruz

Ventura

Los Angeles

Anacapa

Santa Rosa

**SANTA
MONICA
BAY**

Long Beach

Santa Barbara
Island

Santa Catalina

San Nicholas

San Clemente

San Diego



Population

- California... >37 million
- S. California...
 - > 60% of Total
 - > 22 million and growing

















Southern California Urban Sprawl





Satellite



+

-

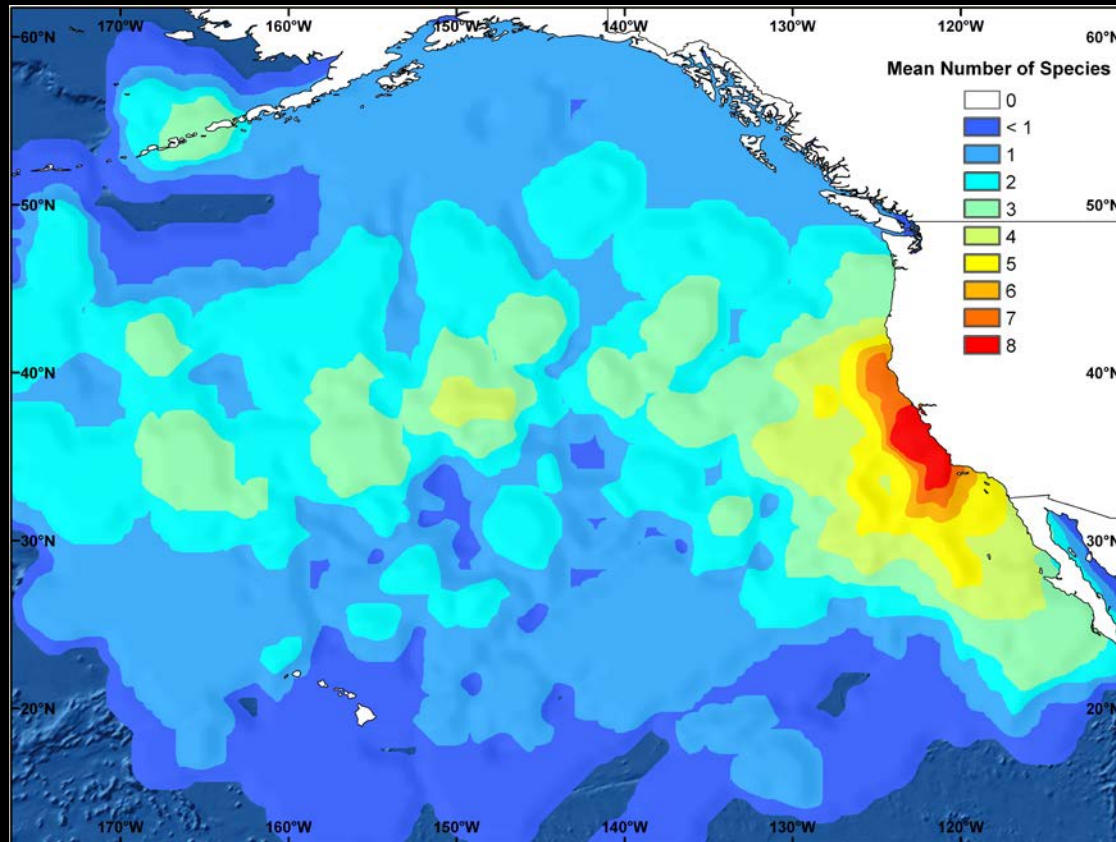
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Pink = mako shark, Red=salmon shark, light blue = blue shark

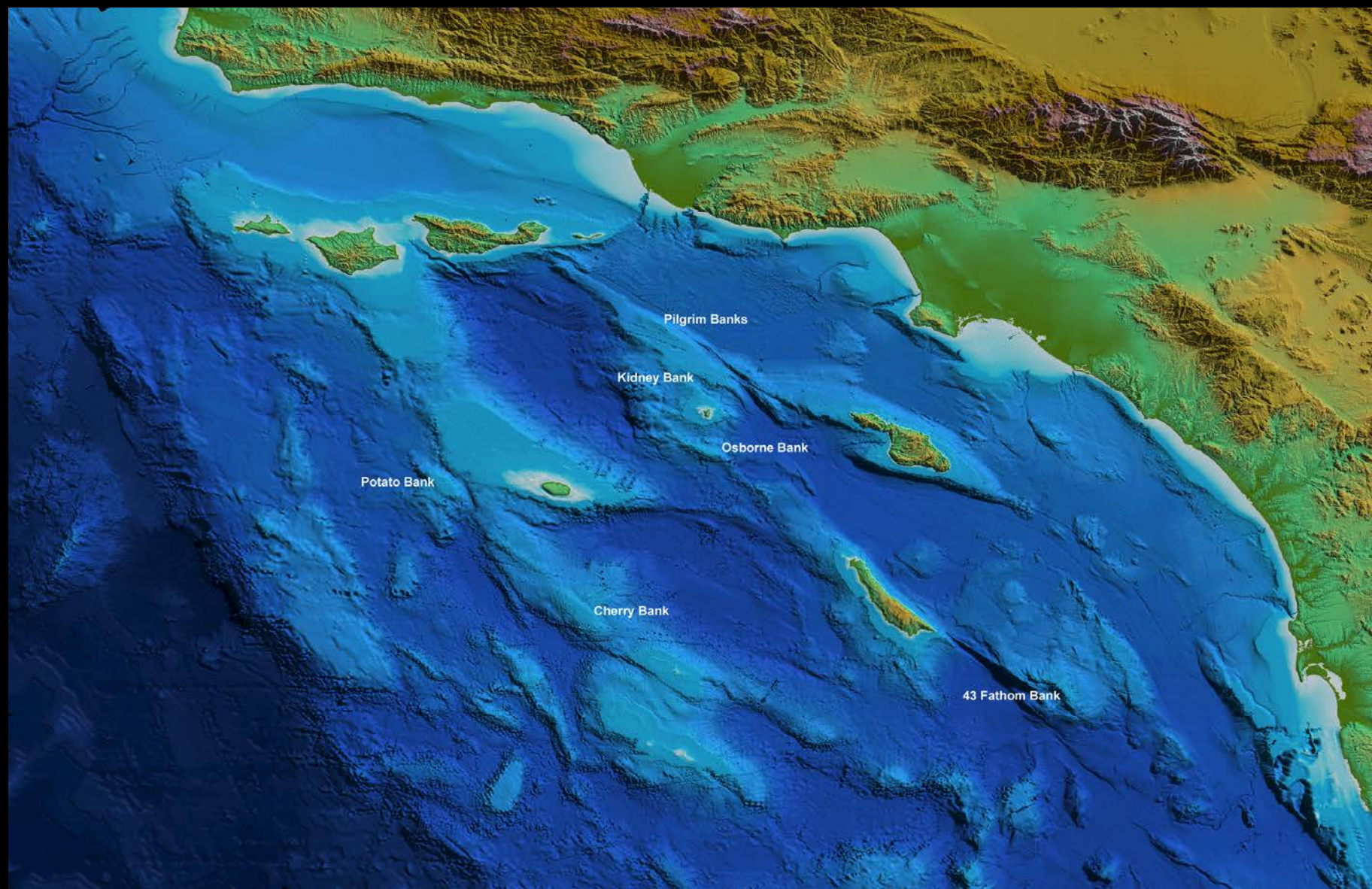
Now Showing: User selected species crossing region between 1-Jul-2009 and 17-Dec-2009

Imagery ©2011 NASA, TerraMetrics - Terms of Use

And Regions Of Higher Biodiversity



TOPP Species Overlap Map:
Where is Top Predator Biodiversity the Highest?





SCRIPPS INSTITUTION OF
OCEANOGRAPHY
UCSD

The Maritime Alliance presents

Maritime Collaboration Summit







Desired Future Qualities

1. Healthy, productive coastal and marine ecosystems.
2. (1*)Diverse and robust ocean economy compatible with healthy ecosystems.
3. Well-managed fisheries—recreational and commercial.
4. Healthy coastal communities in all dimensions, including economic.
5. A model of ecosystem-based management.

Will Continuation on the Present
Trajectory Produce The Desired
Results?

NO

What's Missing?

California & the Ocean: A Leader & A Laggard





WOE IS ME



SHAME ON YOU

A close-up photograph of a chimpanzee's face, shown in profile. The chimpanzee has dark brown fur and is resting its chin on its right hand, with its index finger pointing upwards. Its eyes are closed, and it has a contemplative expression. A large, black, irregular thought bubble is positioned above the chimpanzee's head, containing white text. The background is a solid, bright green color.

Whatever happened
to respect for
experts?



The Question We Are Left With Is..

The background is an abstract, textured composition. It features a grid-like pattern of blue and purple lines, possibly representing a microscopic view of tissue or a stylized architectural structure. The colors are vibrant and layered, with green and yellow tones appearing on the right side. The overall effect is a complex, multi-colored mosaic.

Thank You!