
Establishing a Baseline and Assessing Initial Spatial and Economic Change in the California South Coast Commercial Fisheries

Report to the California Sea Grant College Program

MAP APPENDIX

POINT 97

An  *ecotrust company*

MAP APPENDIX

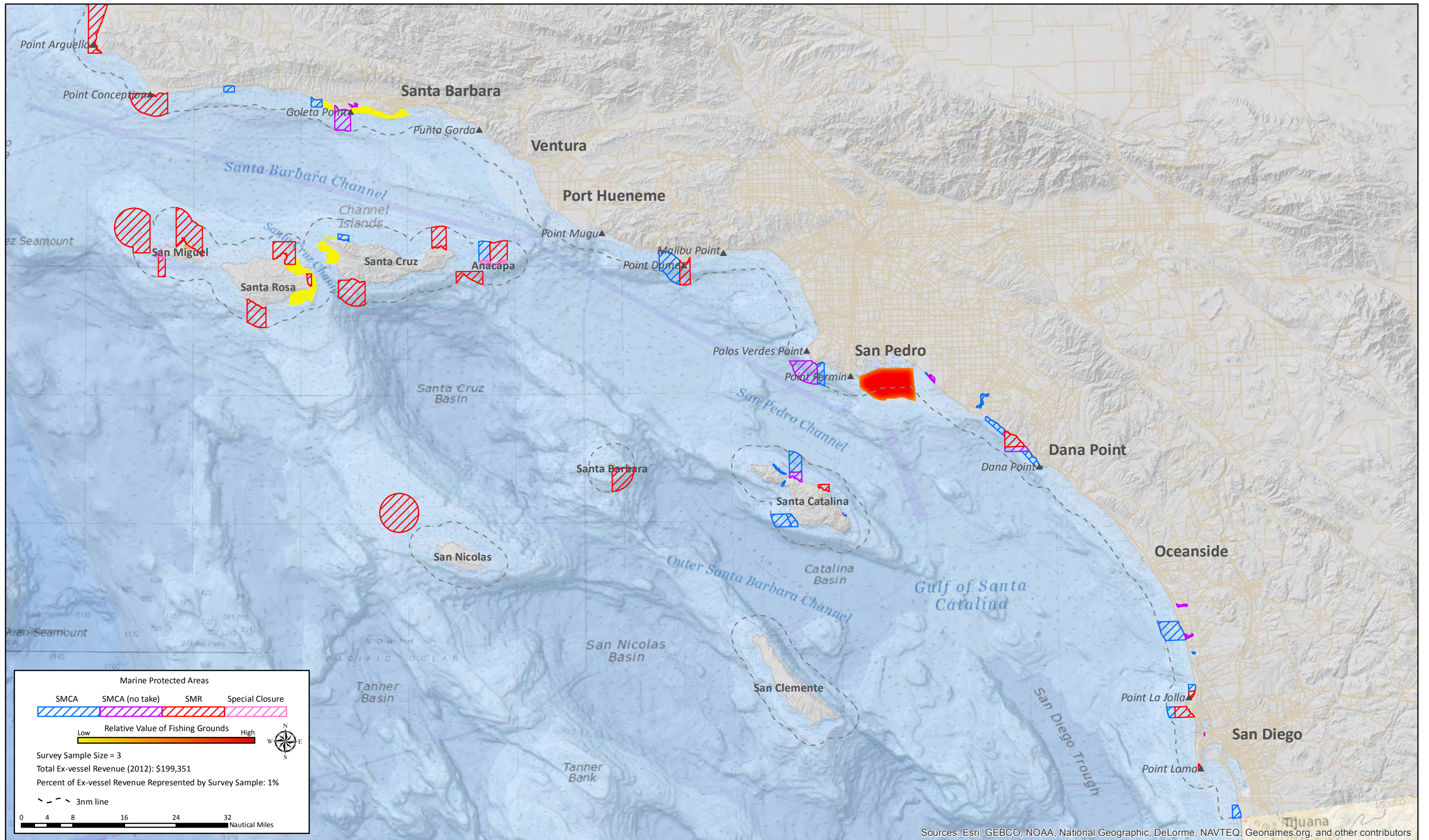
Post MPA (2012)
Baseline Commercial Fishing Patterns

POINT 97

An  ecotrust company

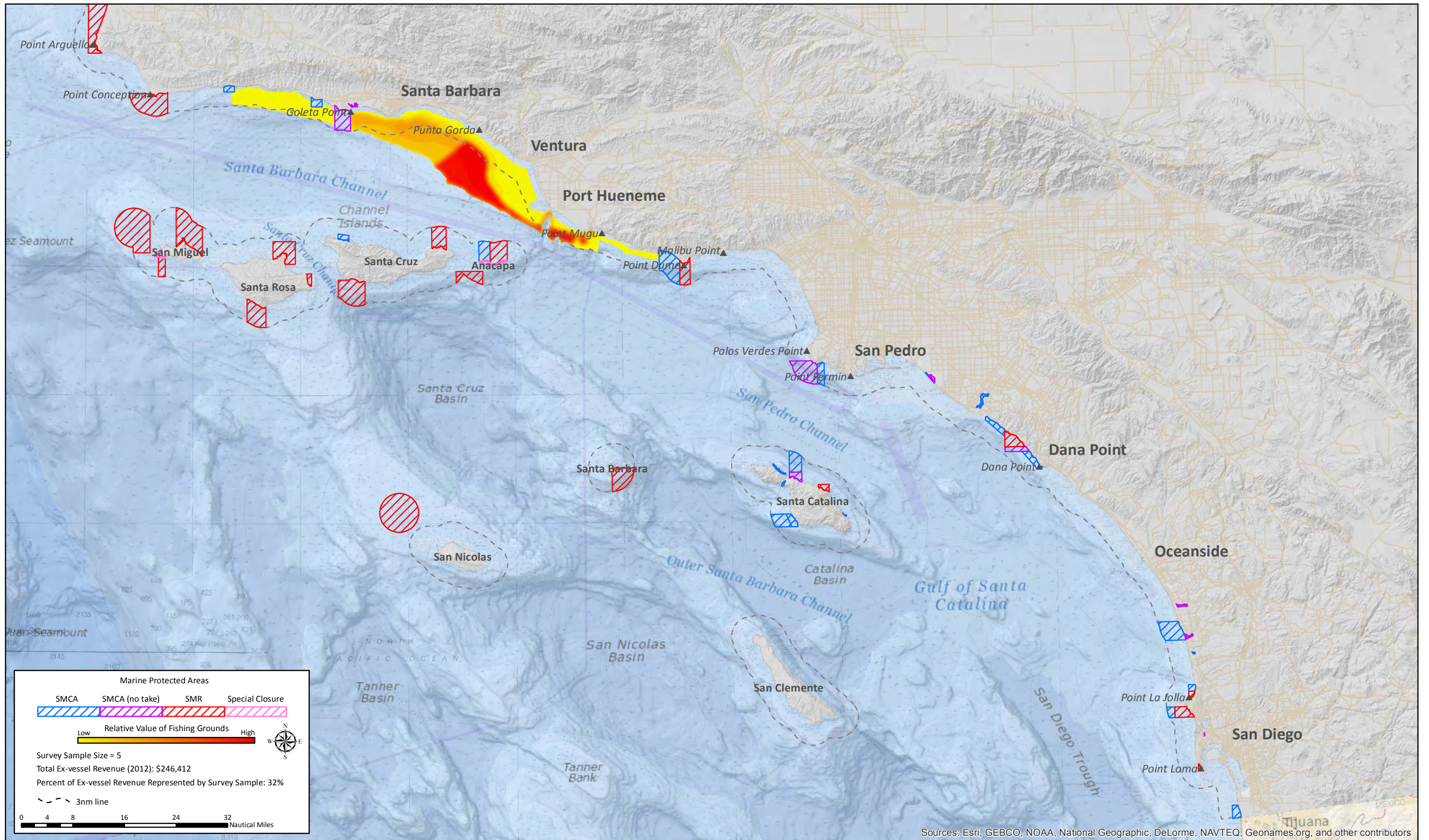
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

All Ports – California halibut–hook & line



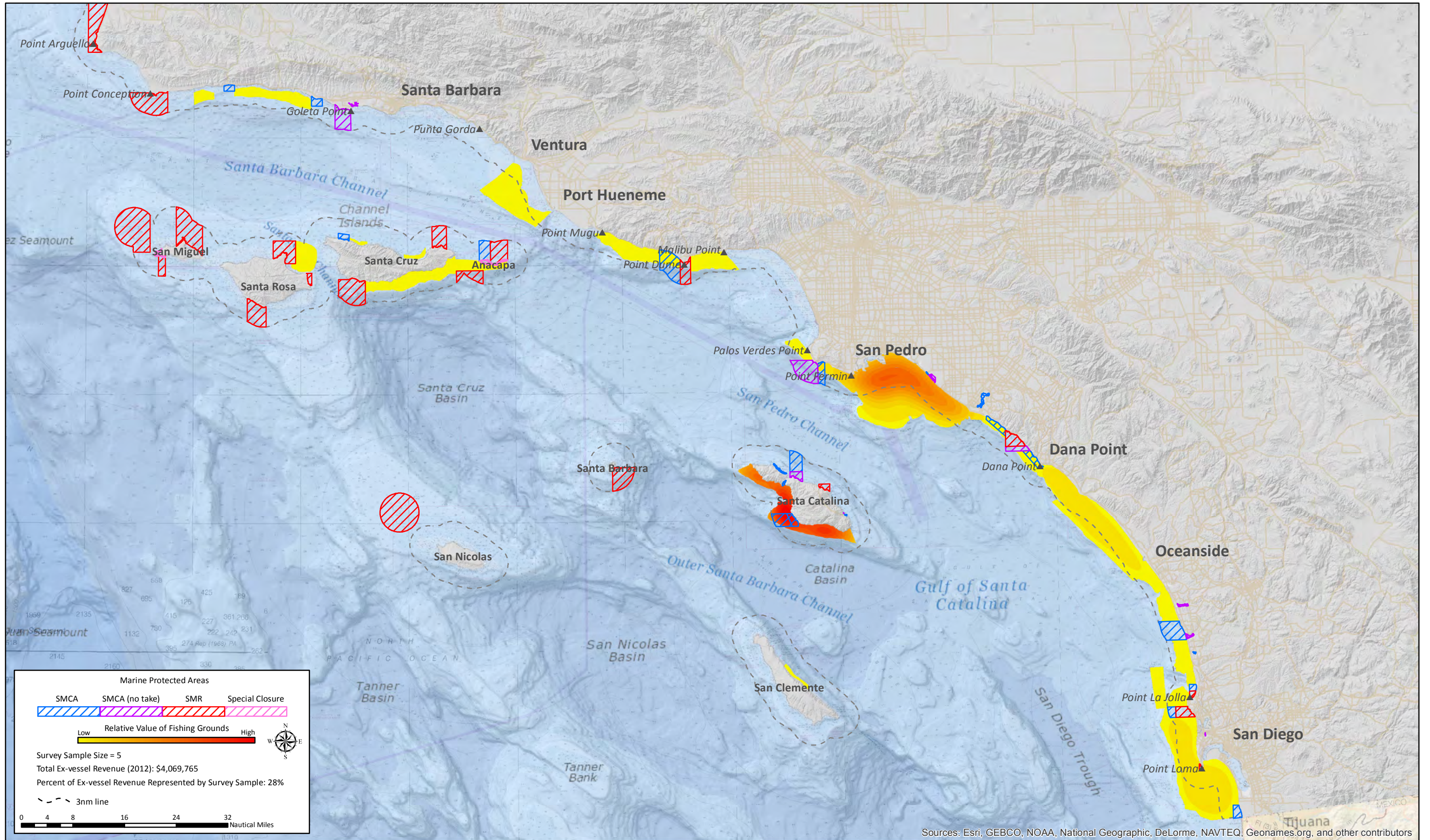
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

All Ports – California halibut–trawl



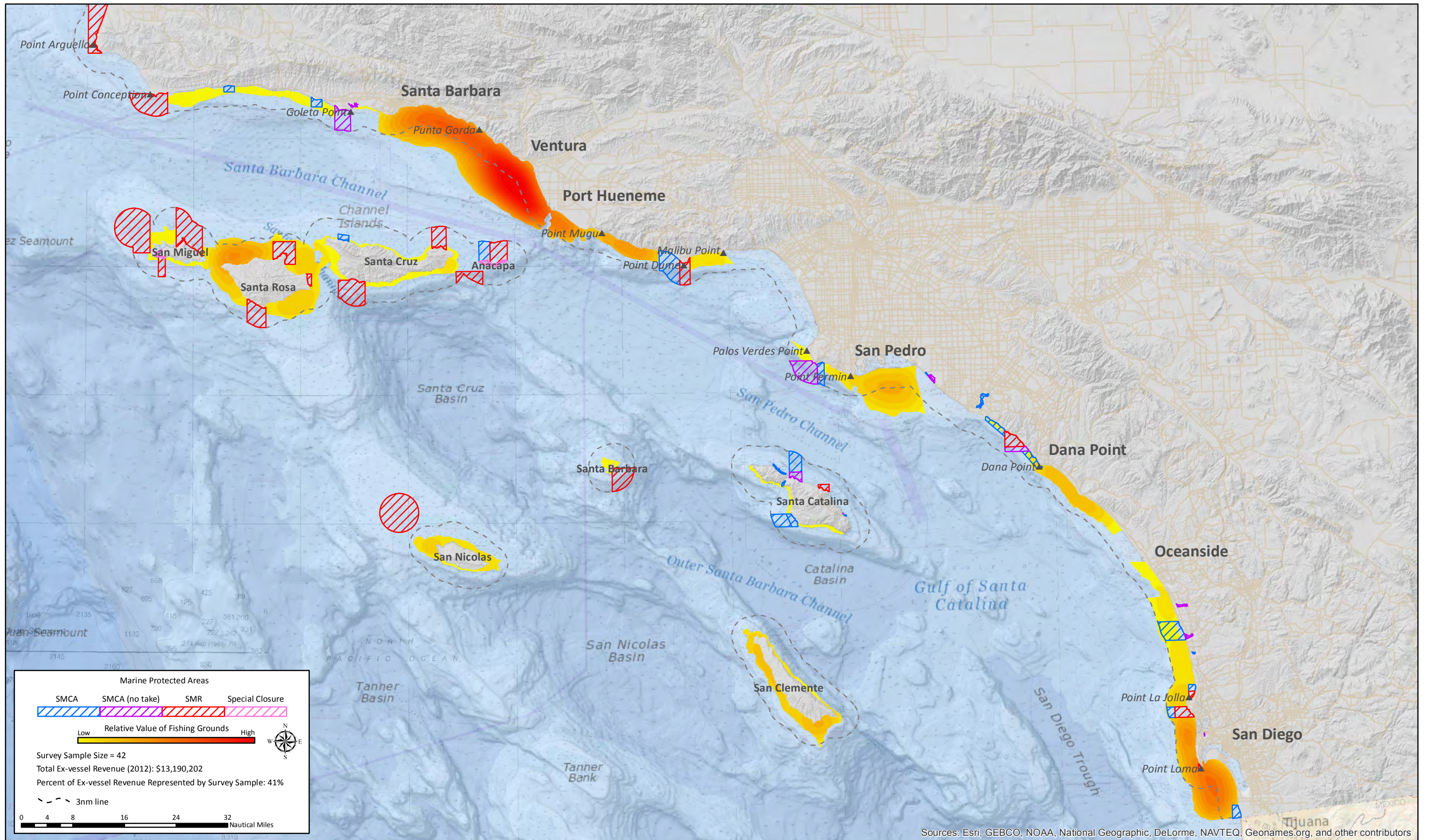
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

All Ports – Coastal pelagics–seine



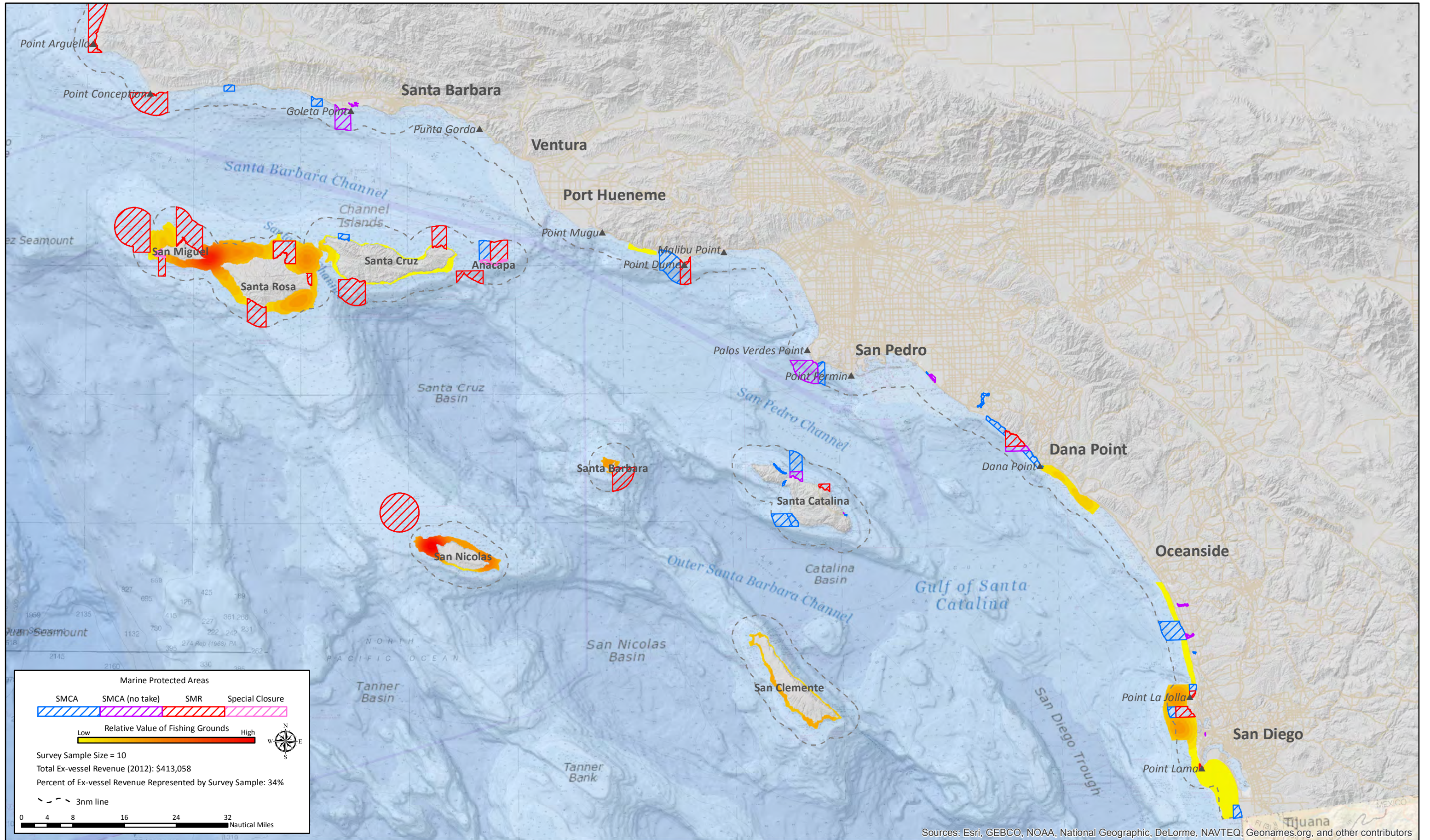
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

All Ports – Lobster-trap



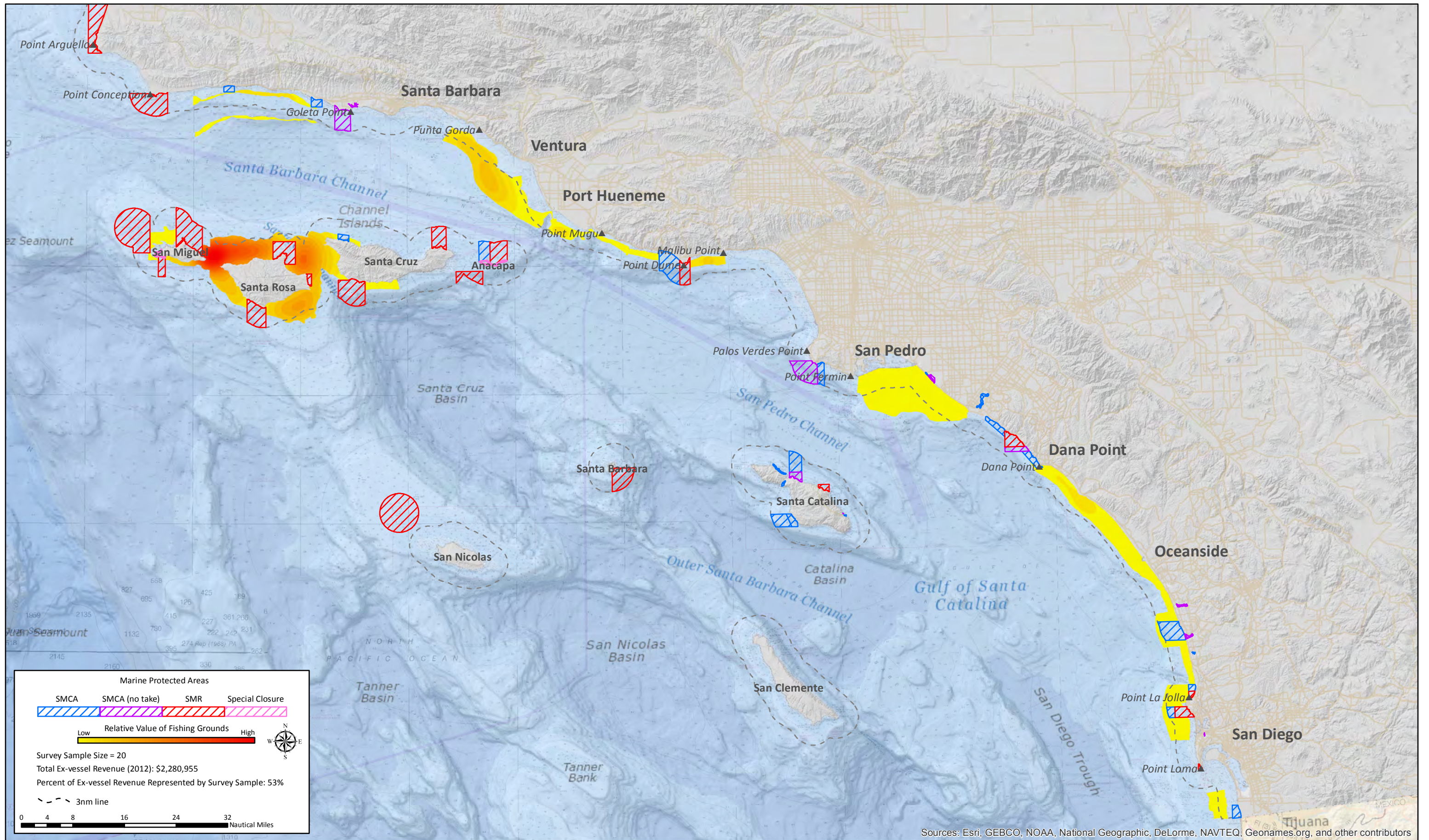
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

All Ports – Nearshore finfish–live–fixed gear



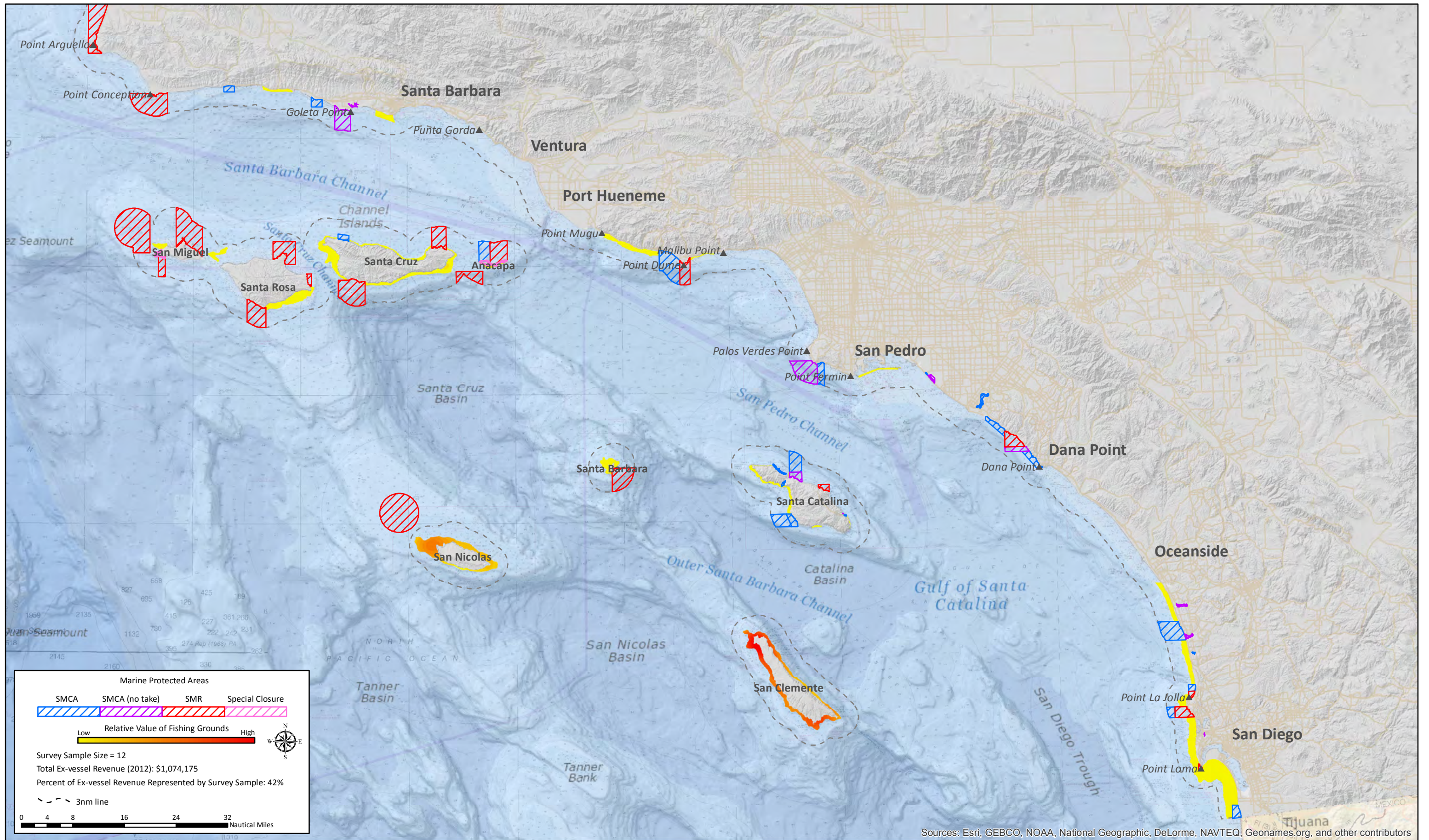
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

All Ports – Rock crab–trap



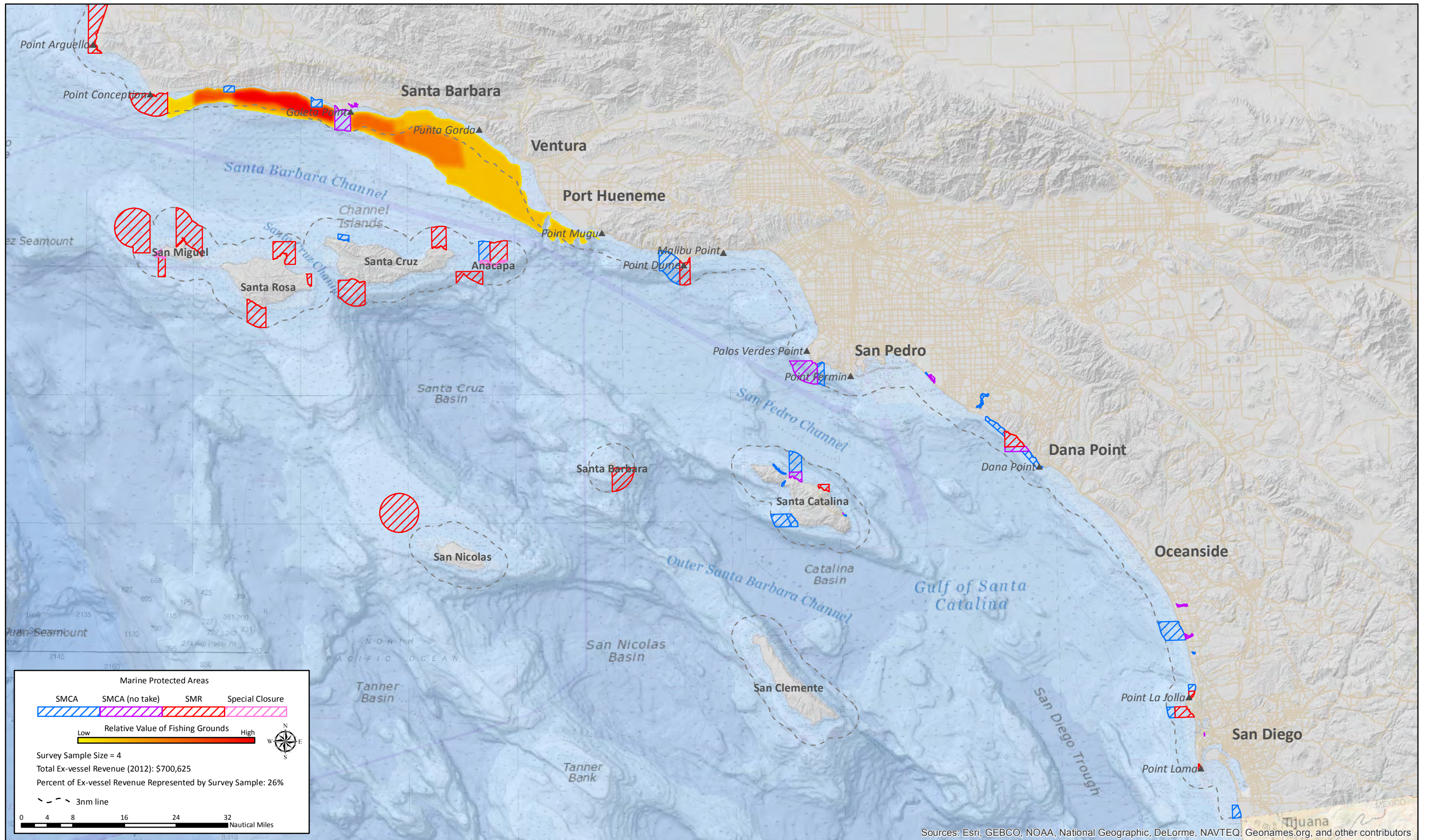
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

All Ports – Sea cucumber–dive



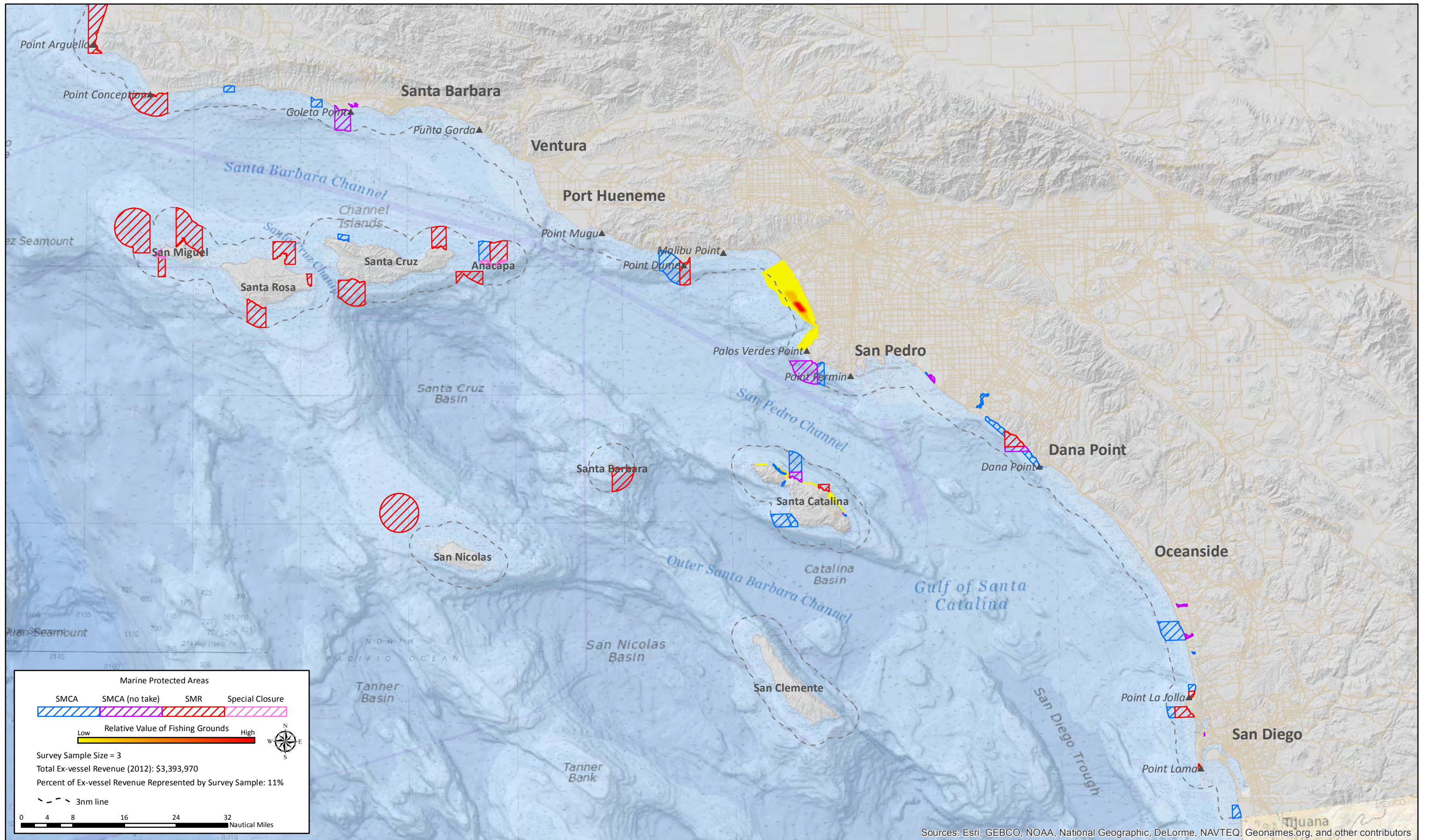
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

All Ports – Sea cucumber–trawl



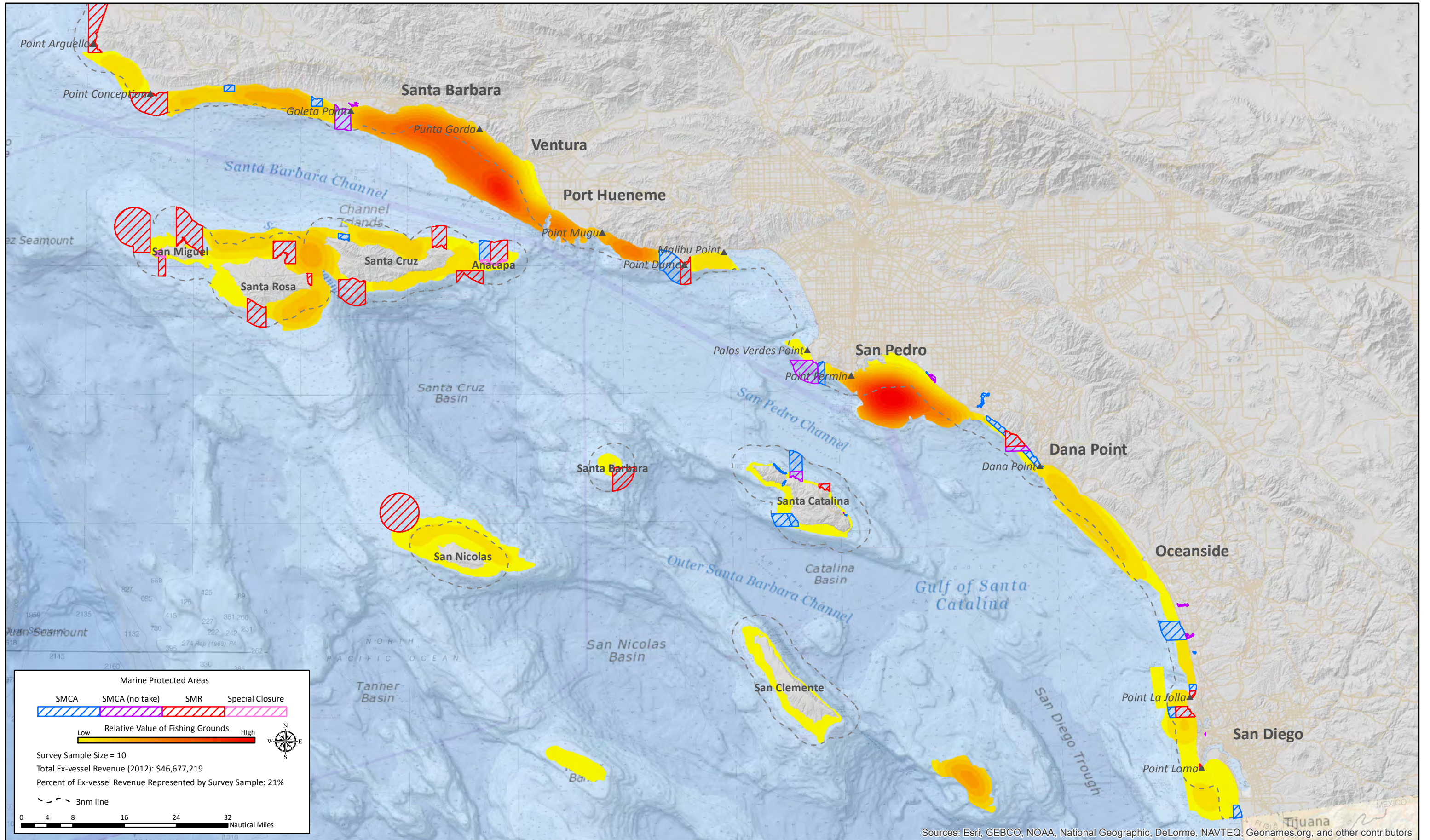
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

All Ports – Market squid–brail



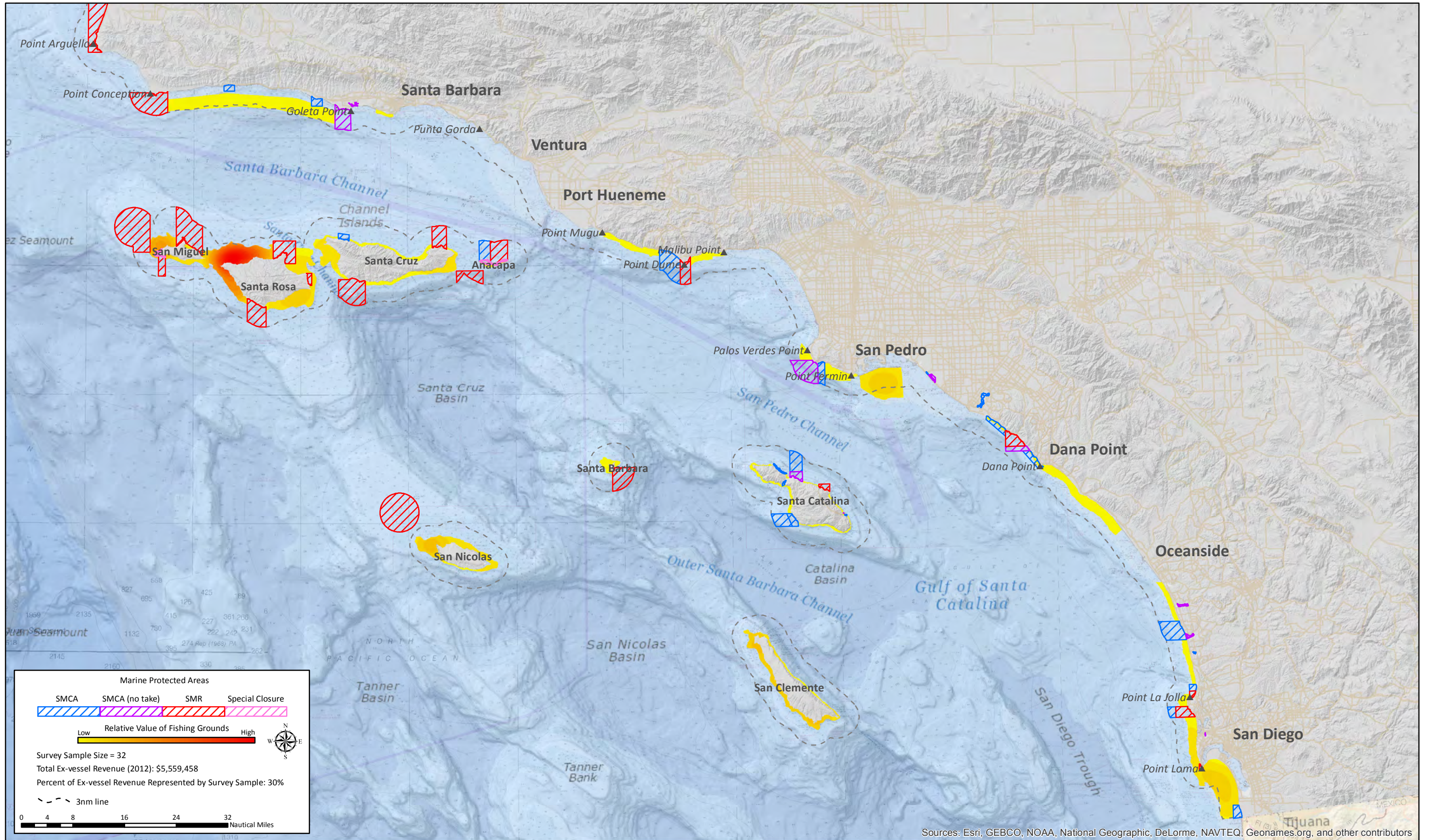
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

All Ports – Market squid–seine



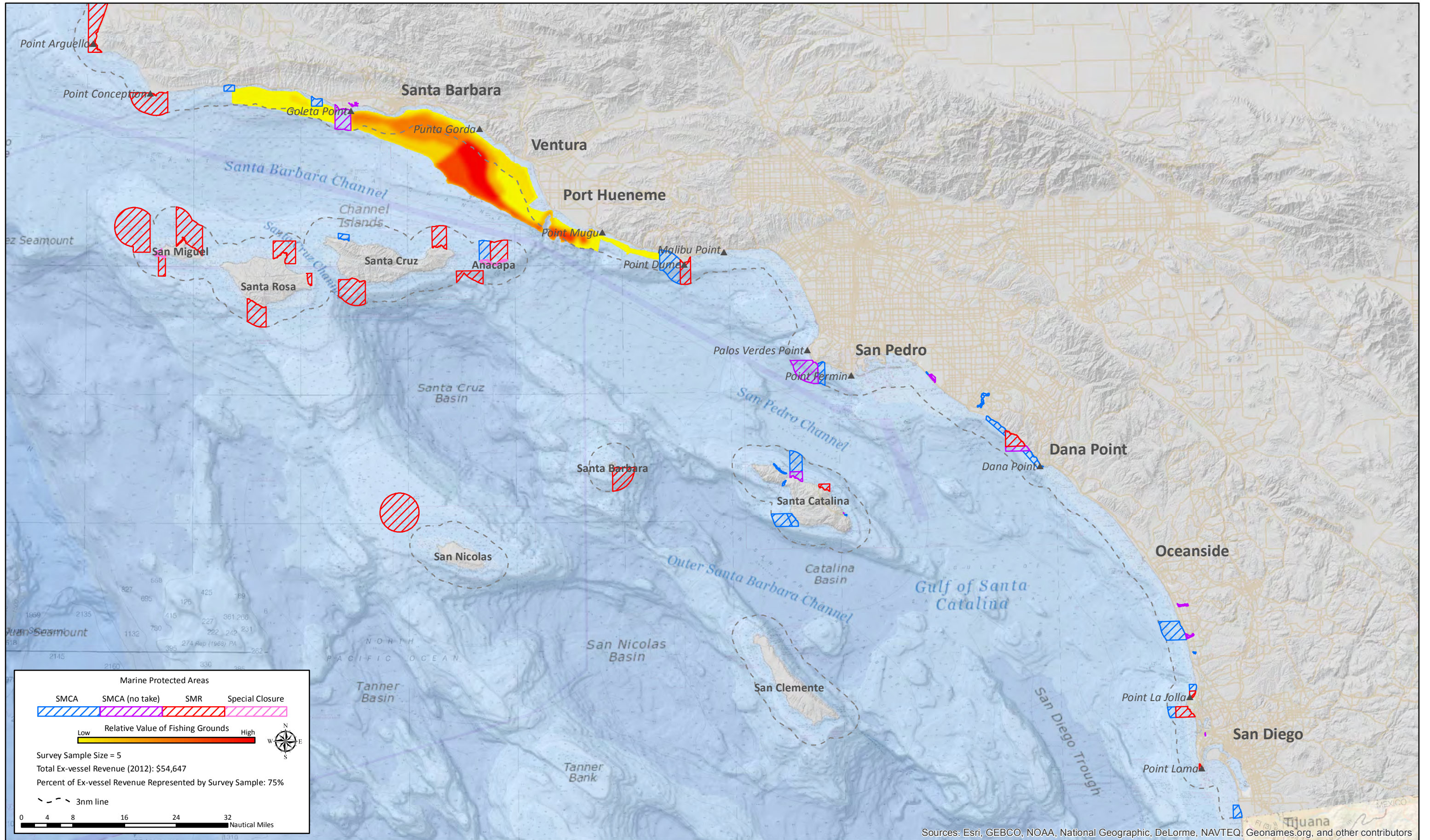
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

All Ports – Urchin–dive



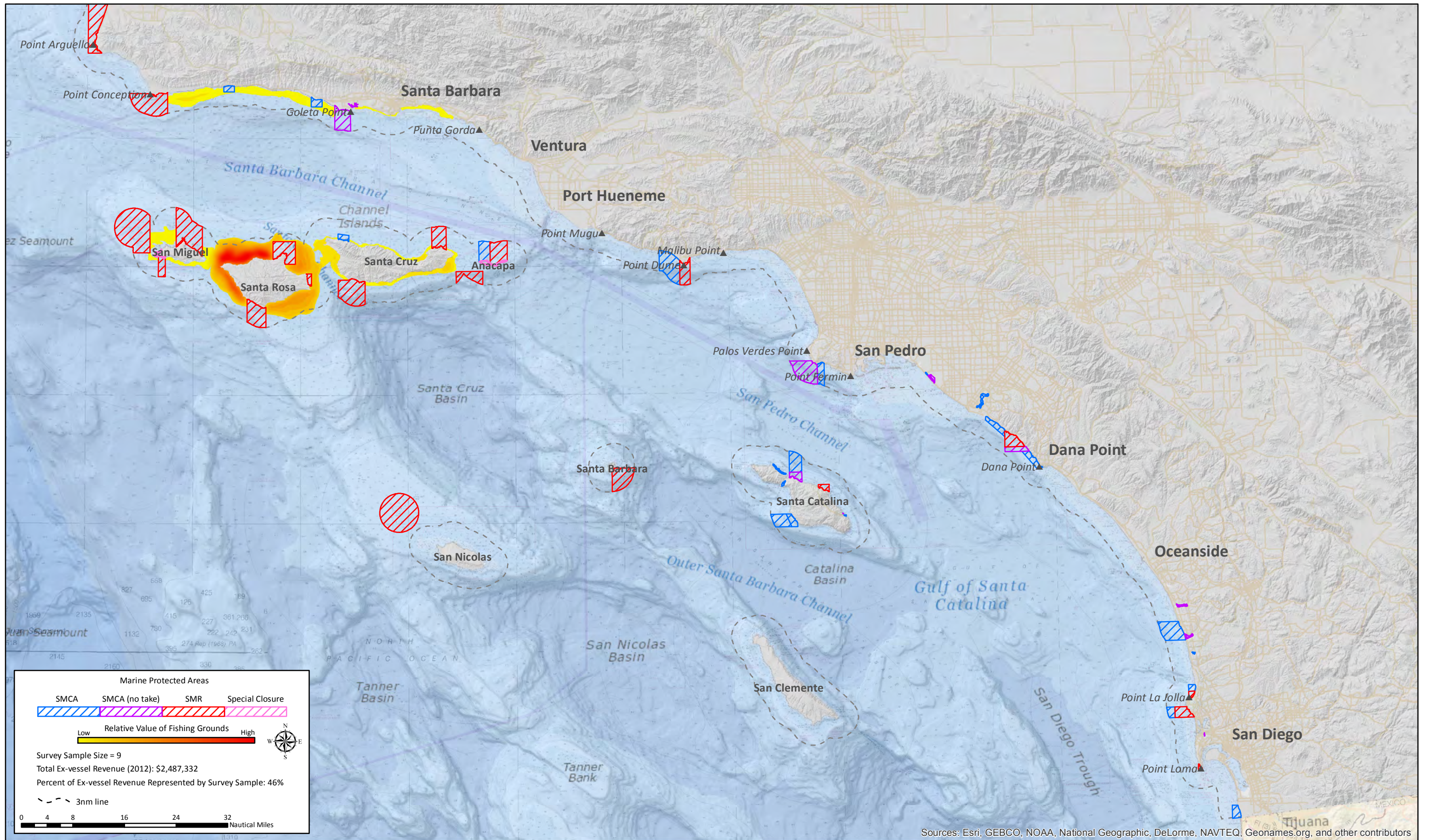
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Santa Barbara – California halibut–trawl



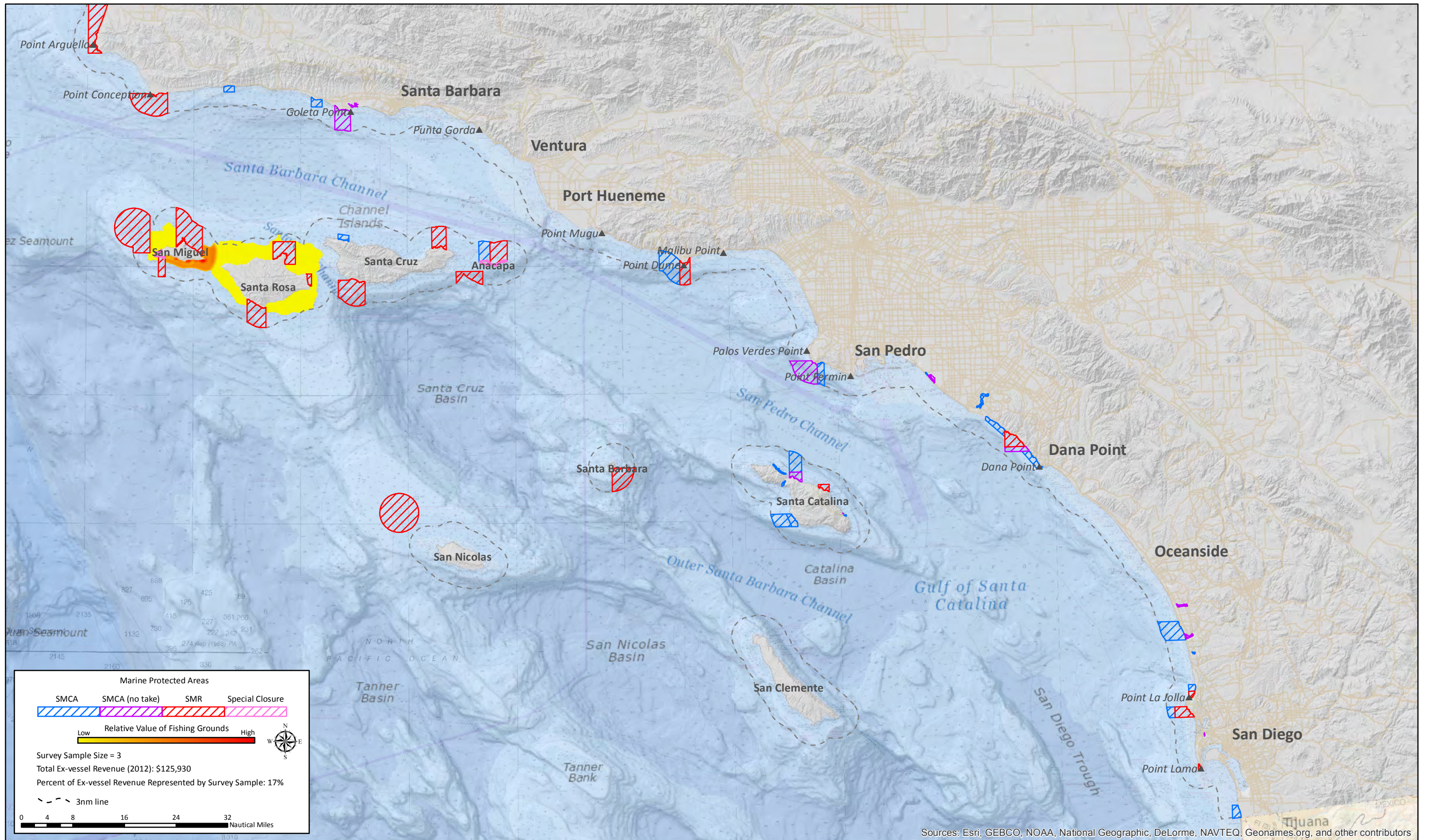
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Santa Barbara – Lobster-trap



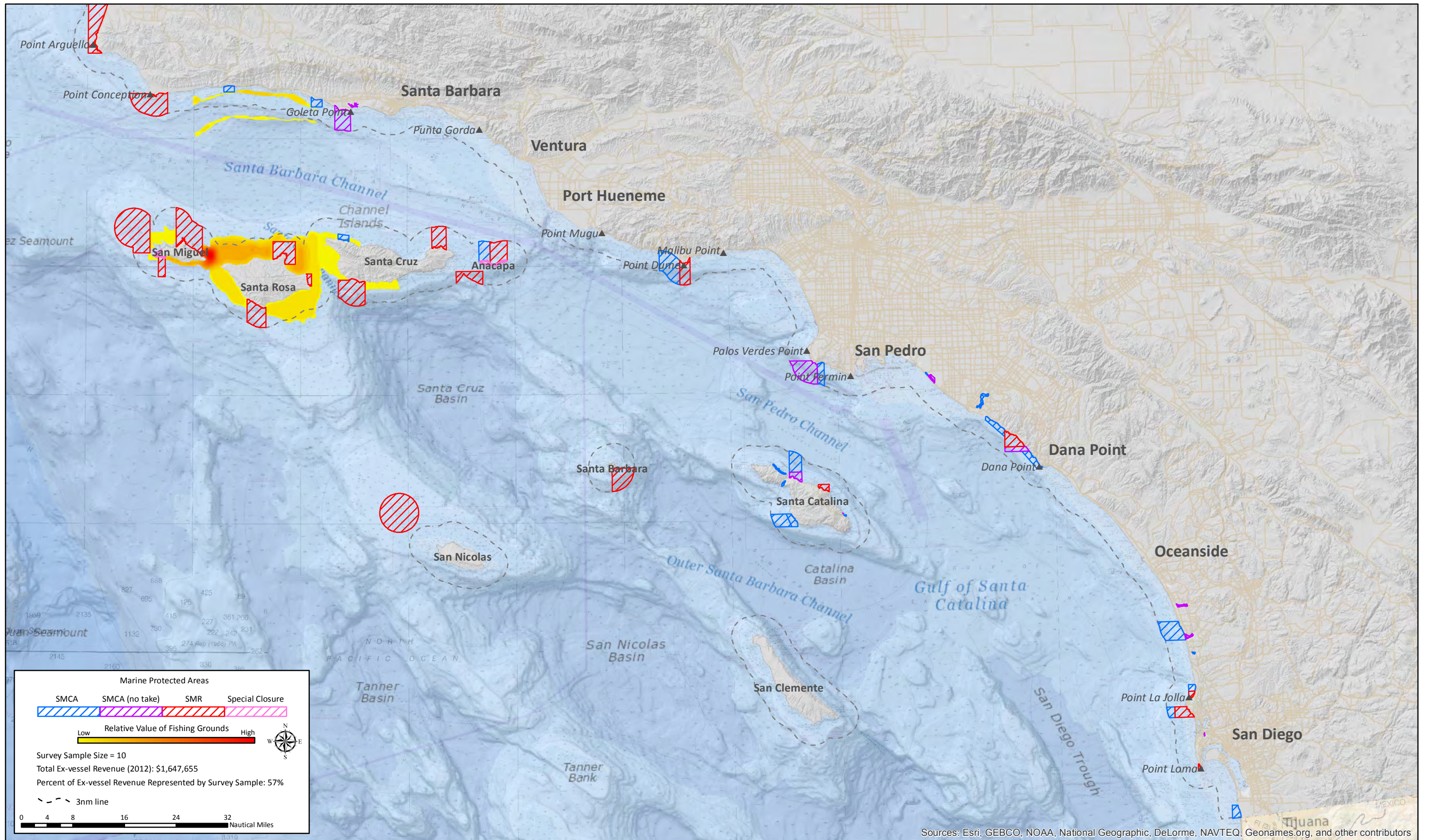
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Santa Barbara – Nearshore finfish–live–fixed gear



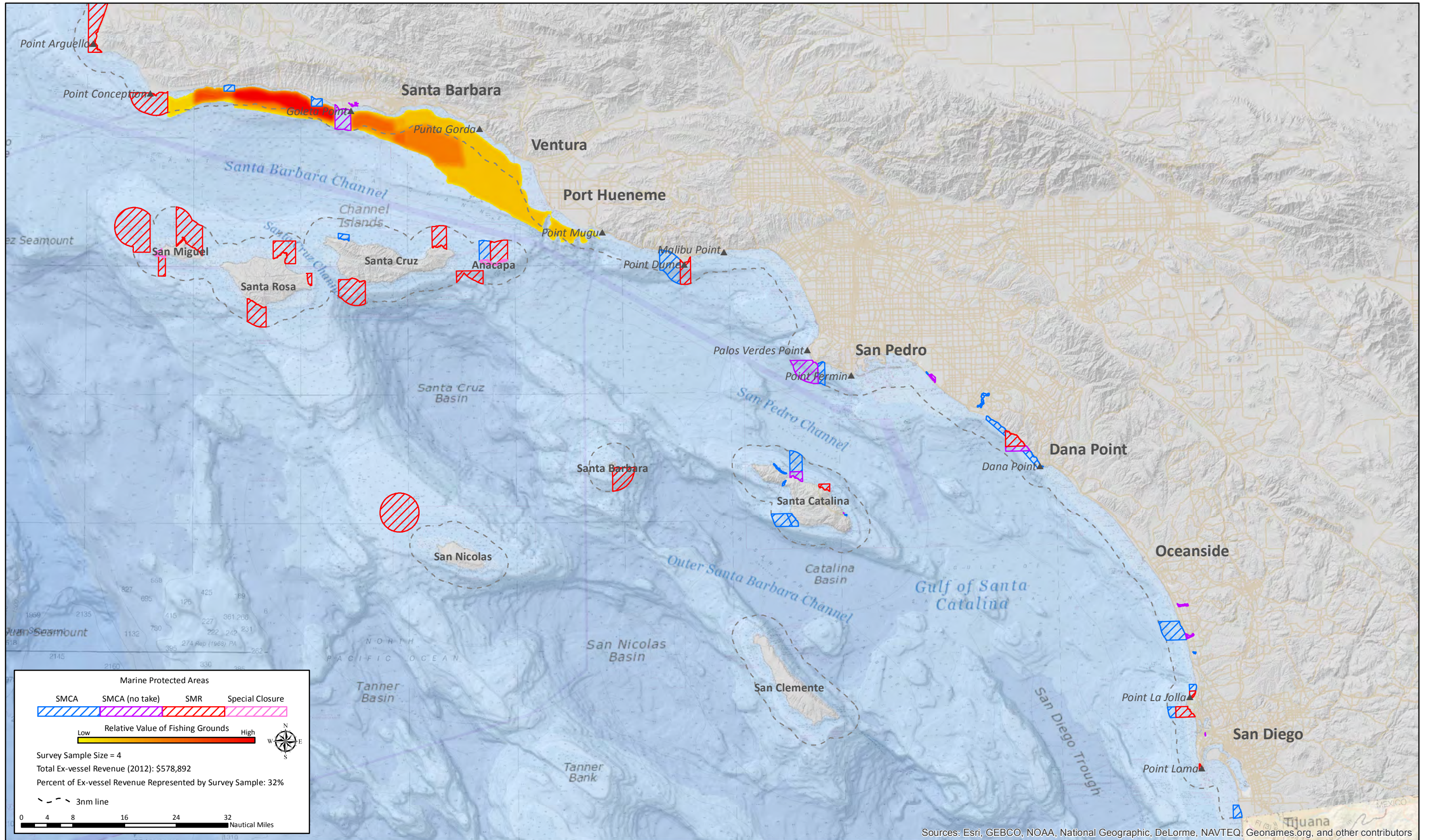
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Santa Barbara – Rock crab–trap



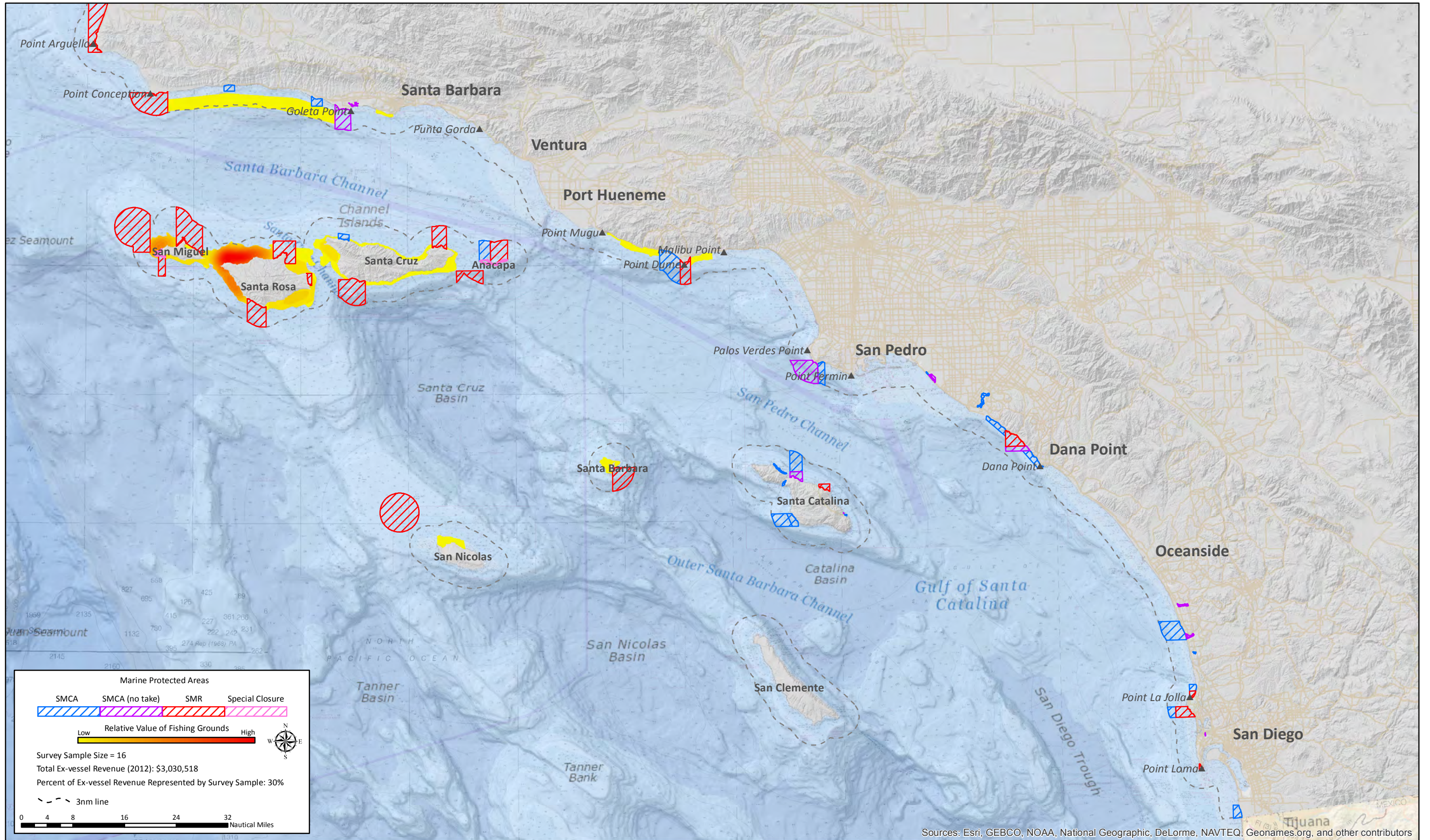
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Santa Barbara – Sea cucumber–trawl



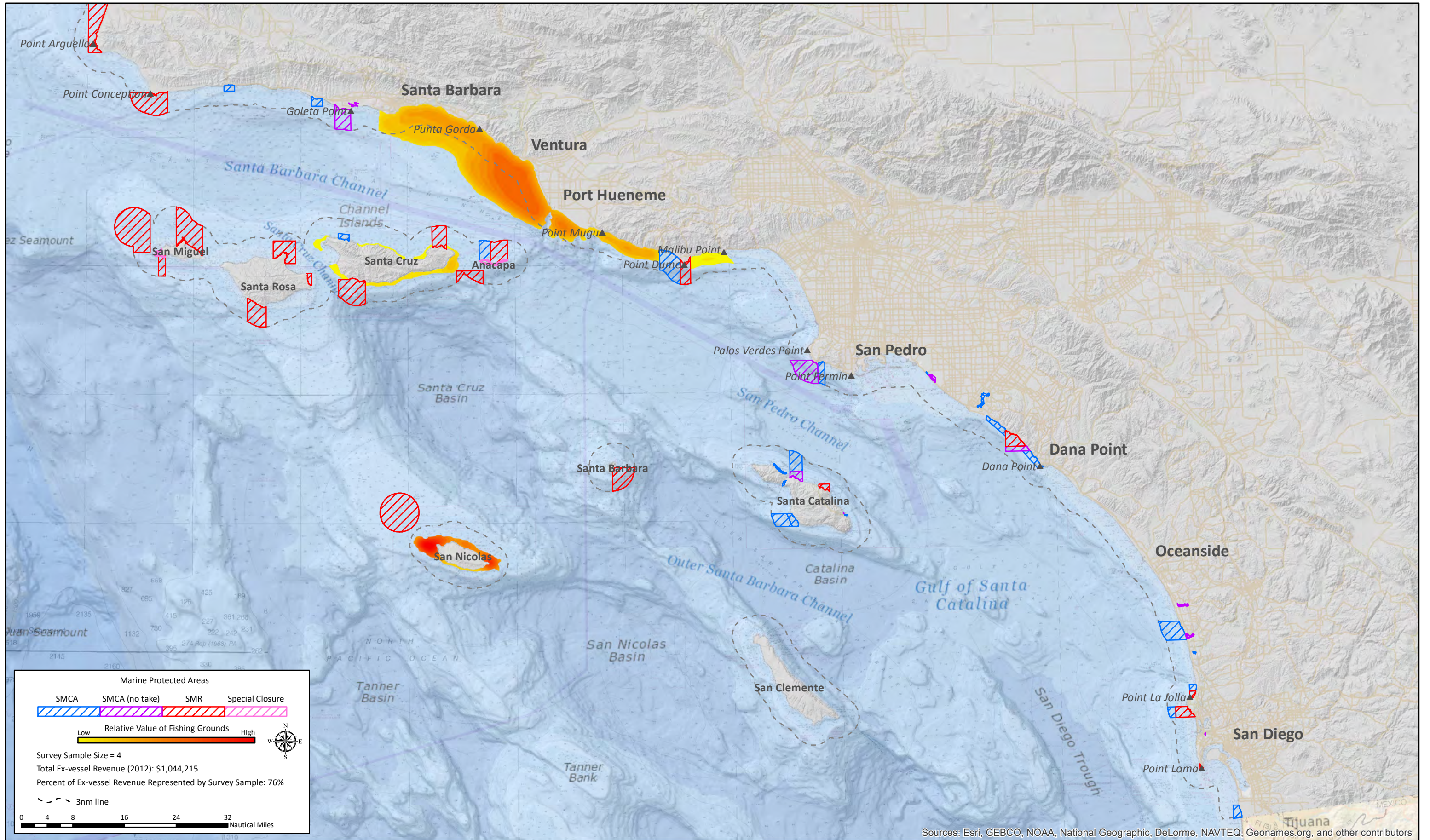
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Santa Barbara – Urchin–dive



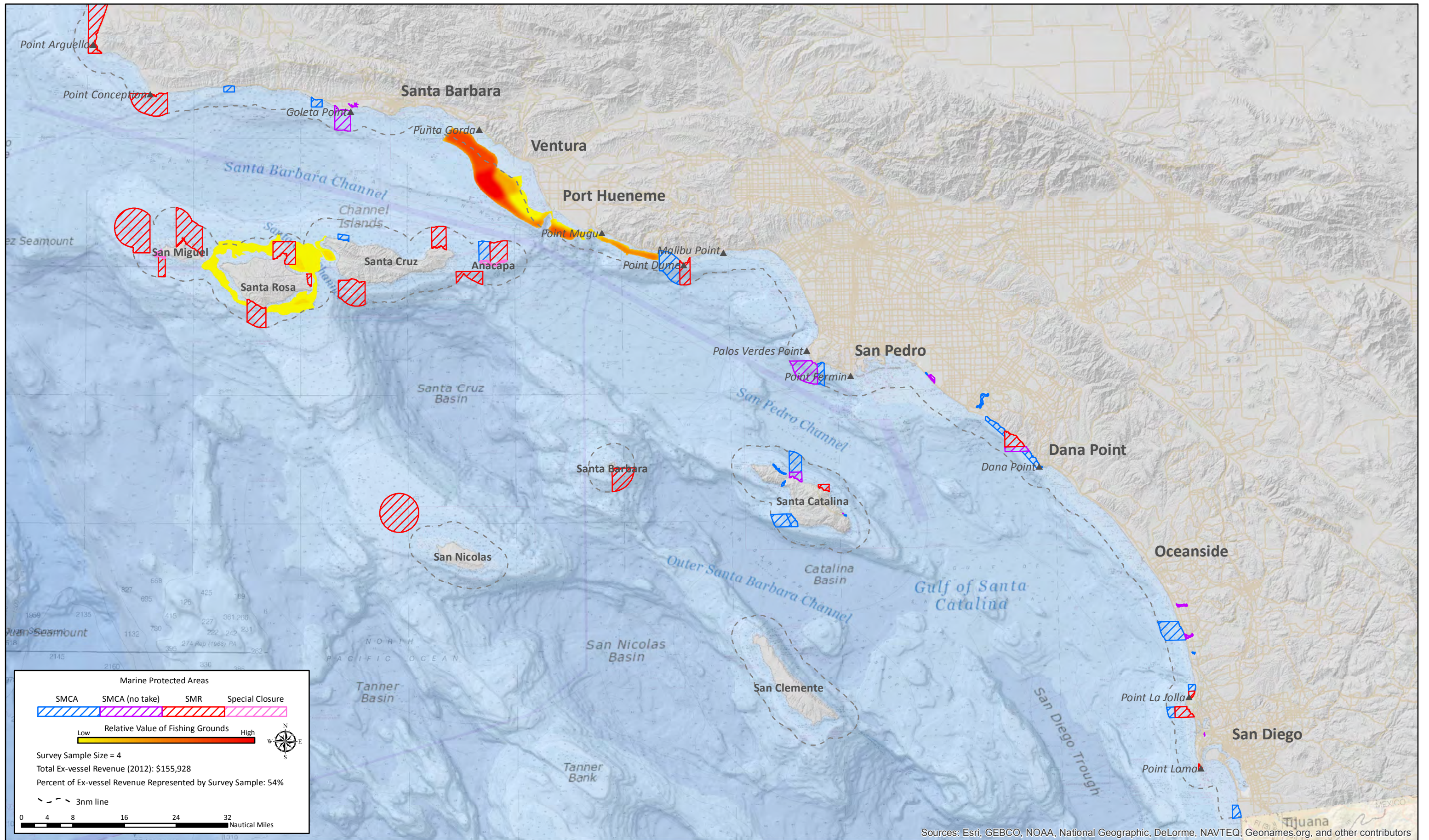
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Ventura – Lobster-trap



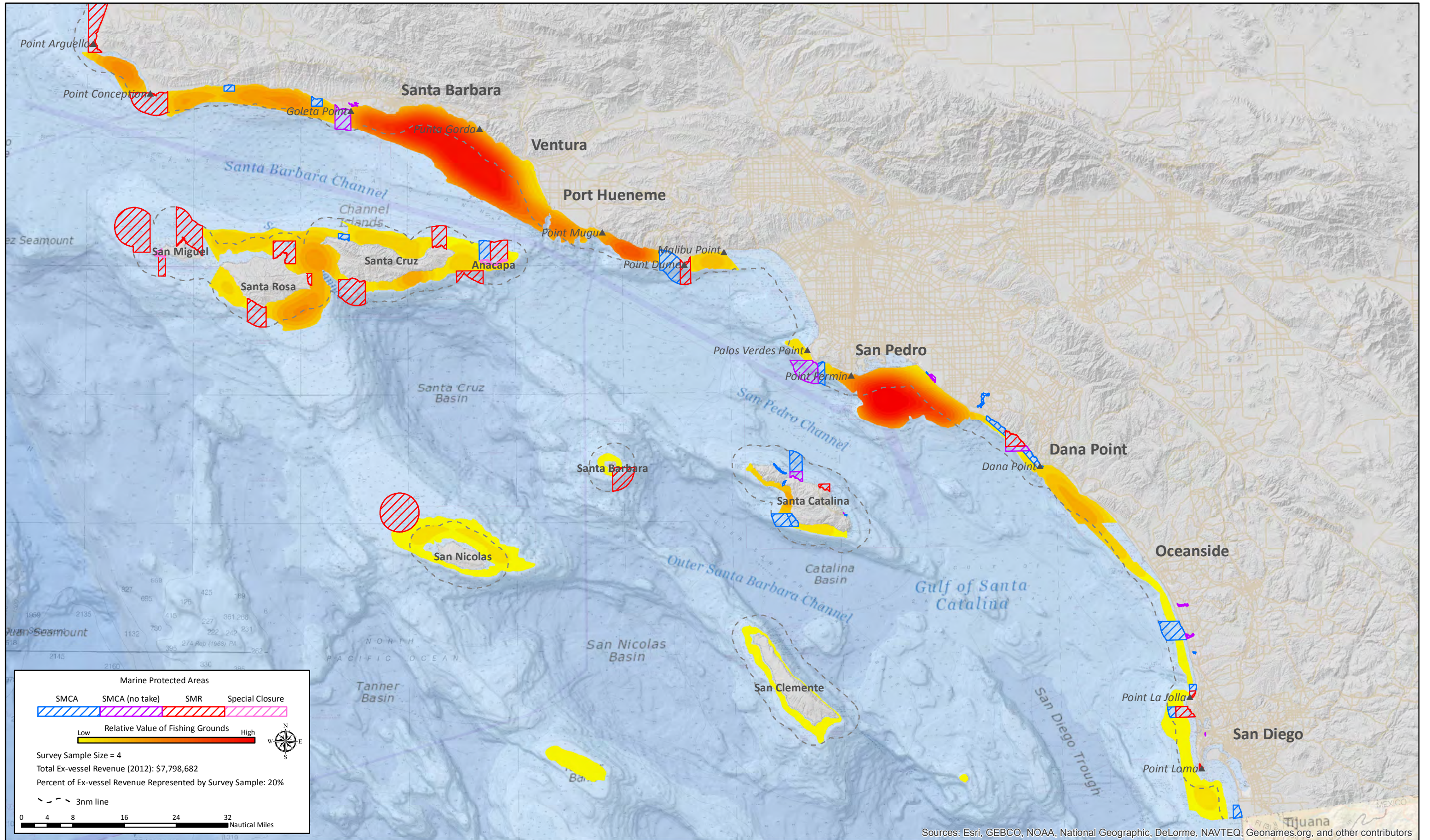
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Ventura – Rock crab–trap



California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Ventura – Market squid–seine



Marine Protected Areas

SMCA	SMCA (no take)	SMR	Special Closure

Relative Value of Fishing Grounds

Low High

Survey Sample Size = 4
 Total Ex-vessel Revenue (2012): \$7,798,682
 Percent of Ex-vessel Revenue Represented by Survey Sample: 20%

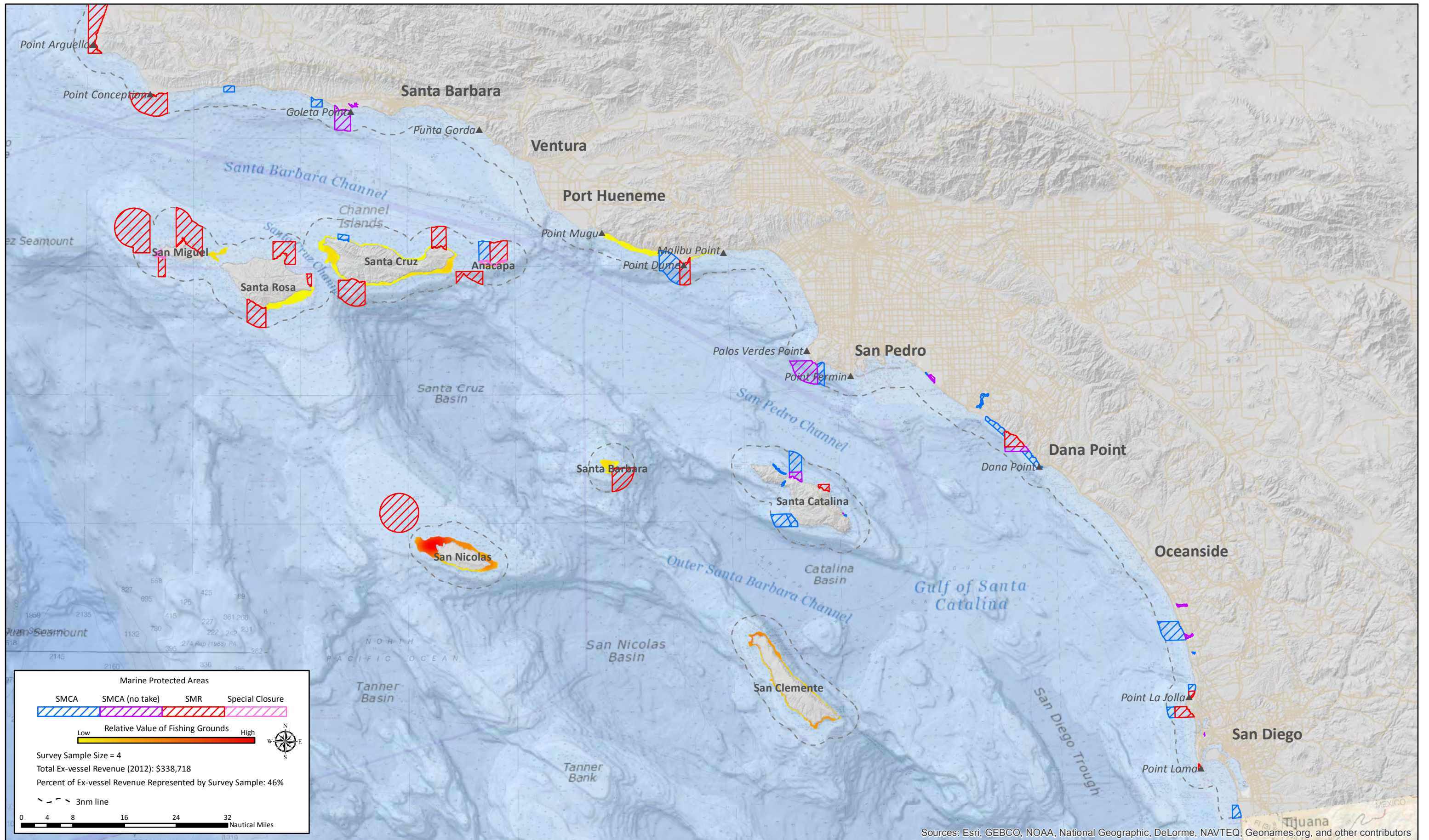
--- 3nm line

0 4 8 16 24 32 Nautical Miles

Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, NAVTEQ, Geonames.org, and other contributors

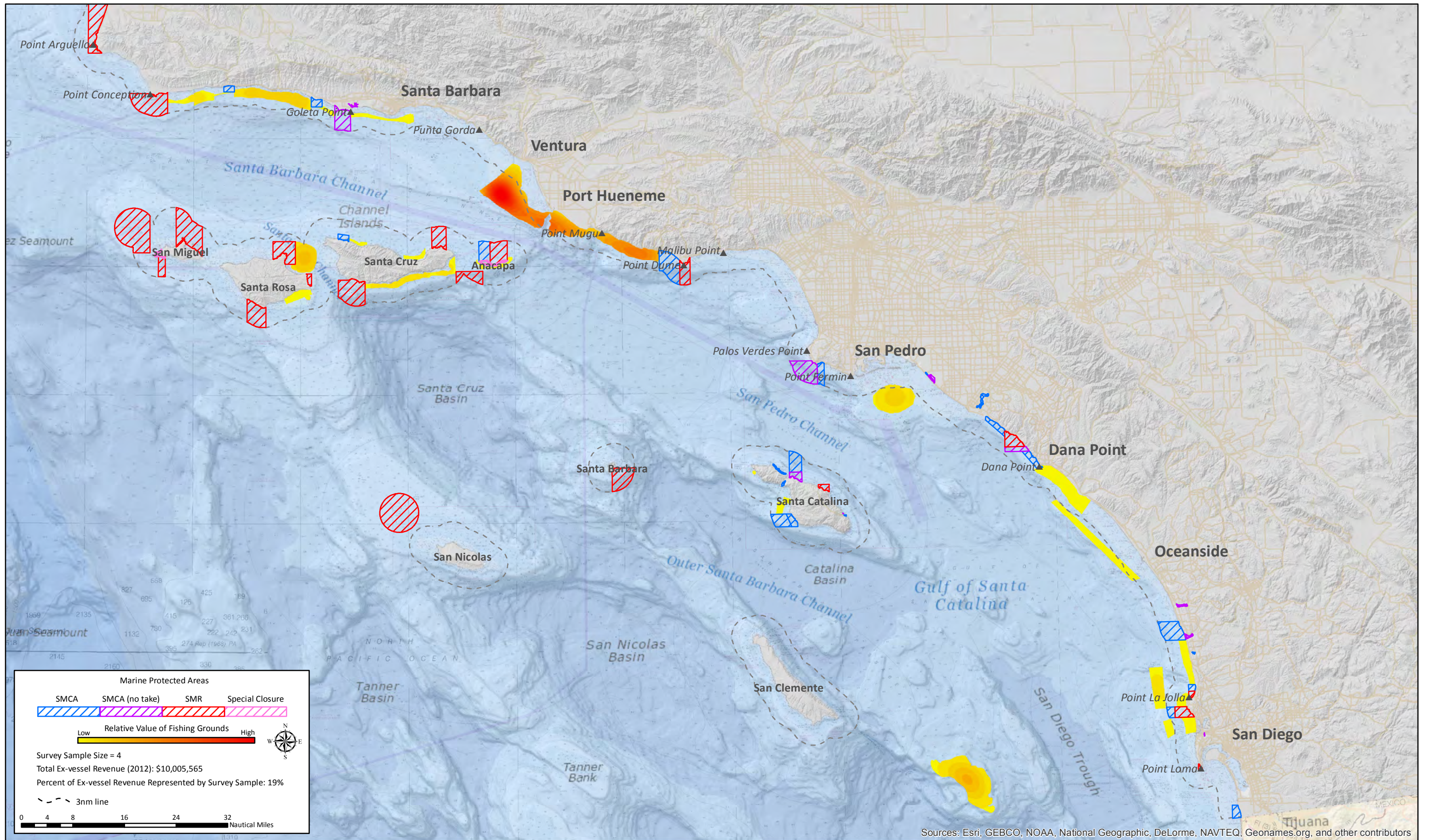
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Port Hueneme – Sea cucumber–dive



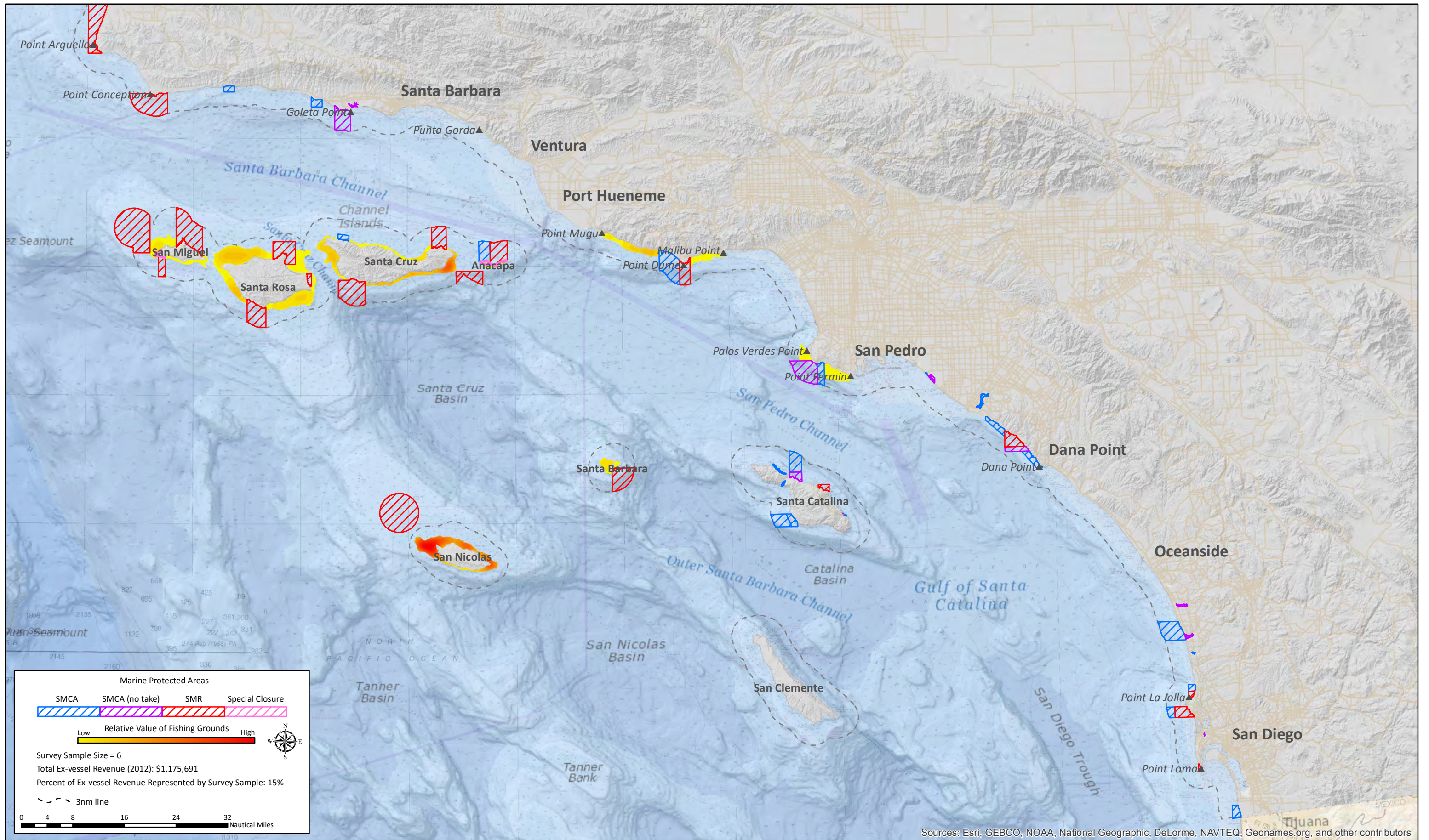
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Port Hueneme – Market squid–seine



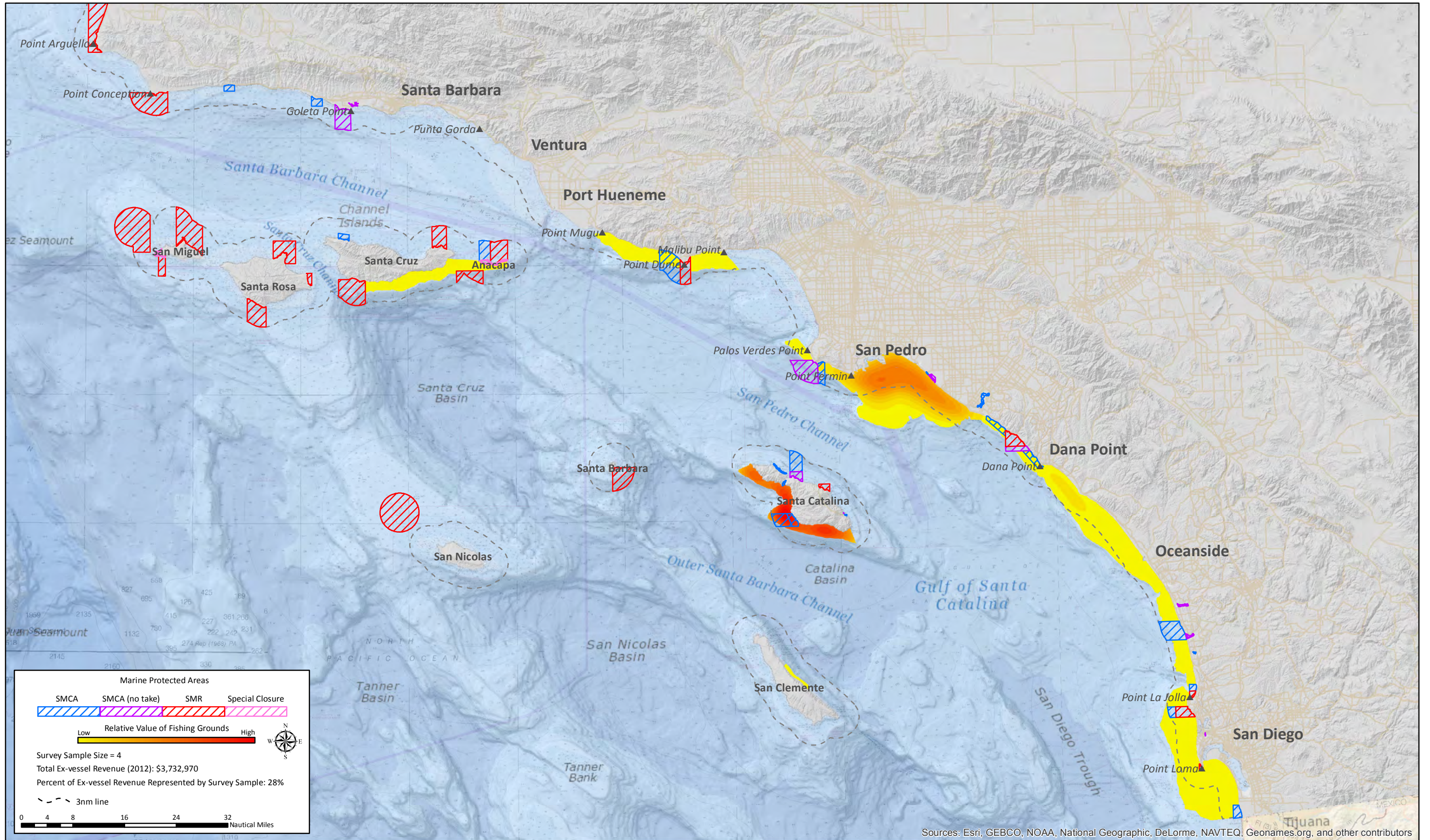
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Port Hueneme – Urchin–dive



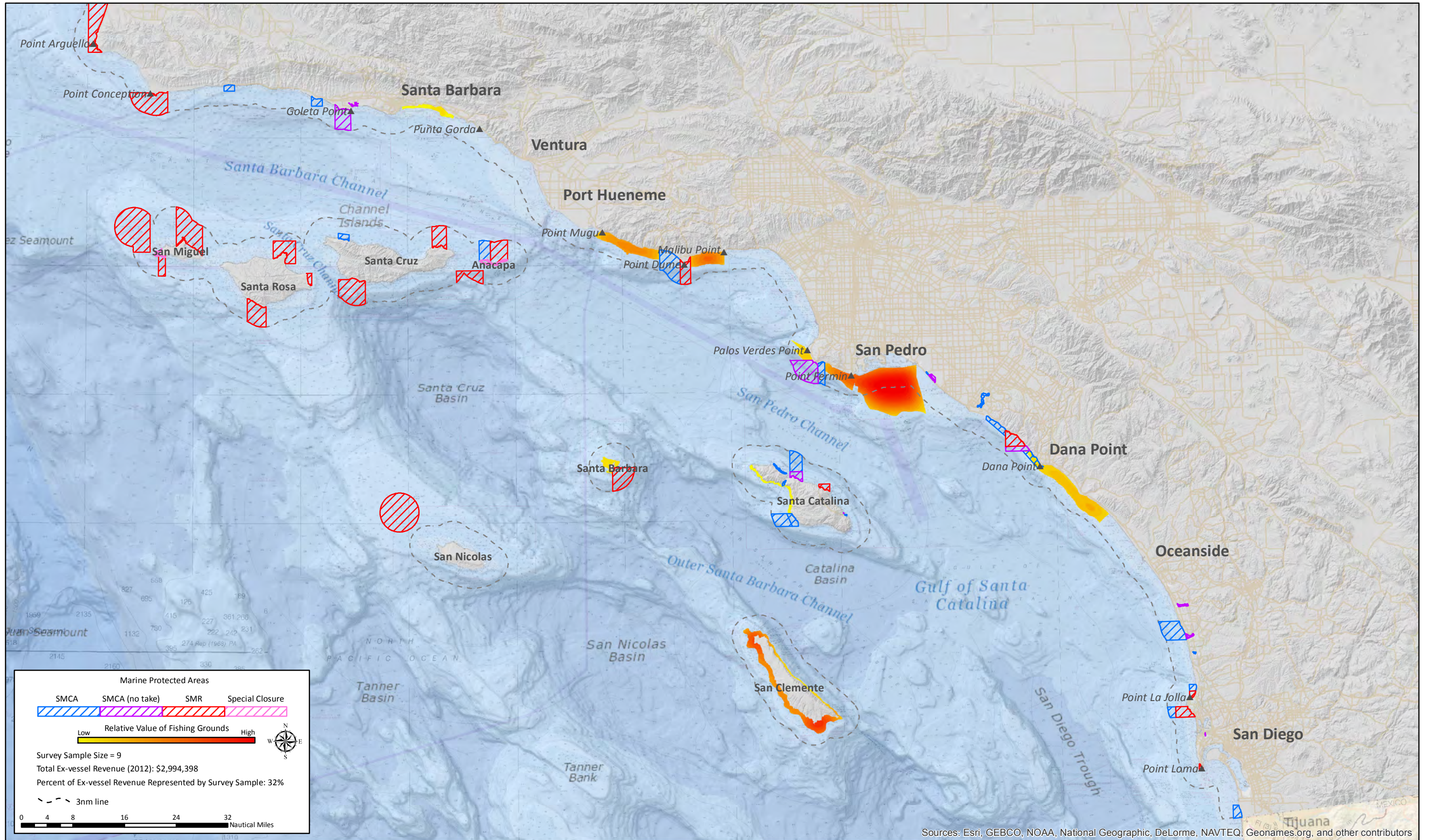
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

San Pedro – Coastal pelagics–seine



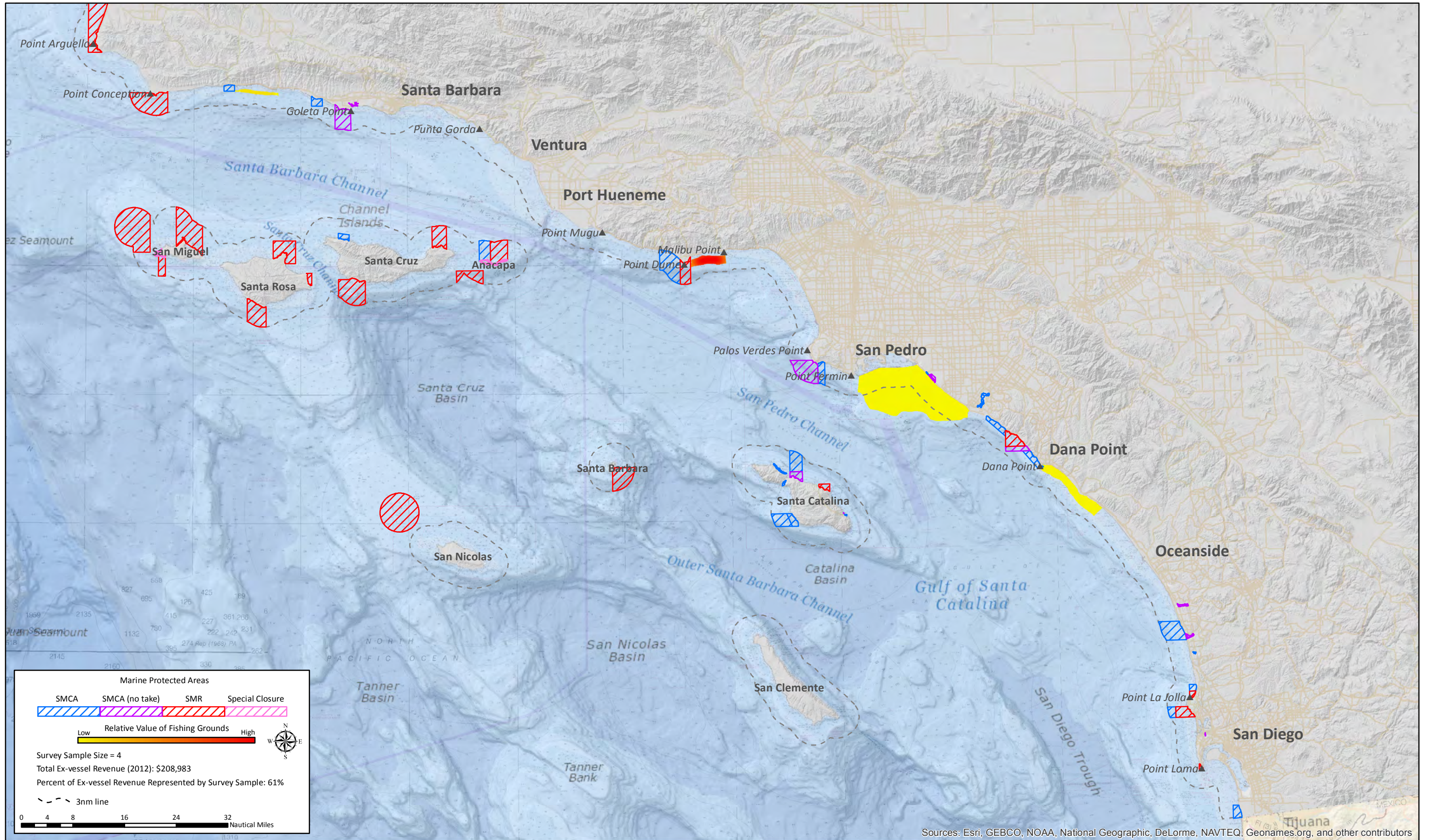
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

San Pedro – Lobster-trap



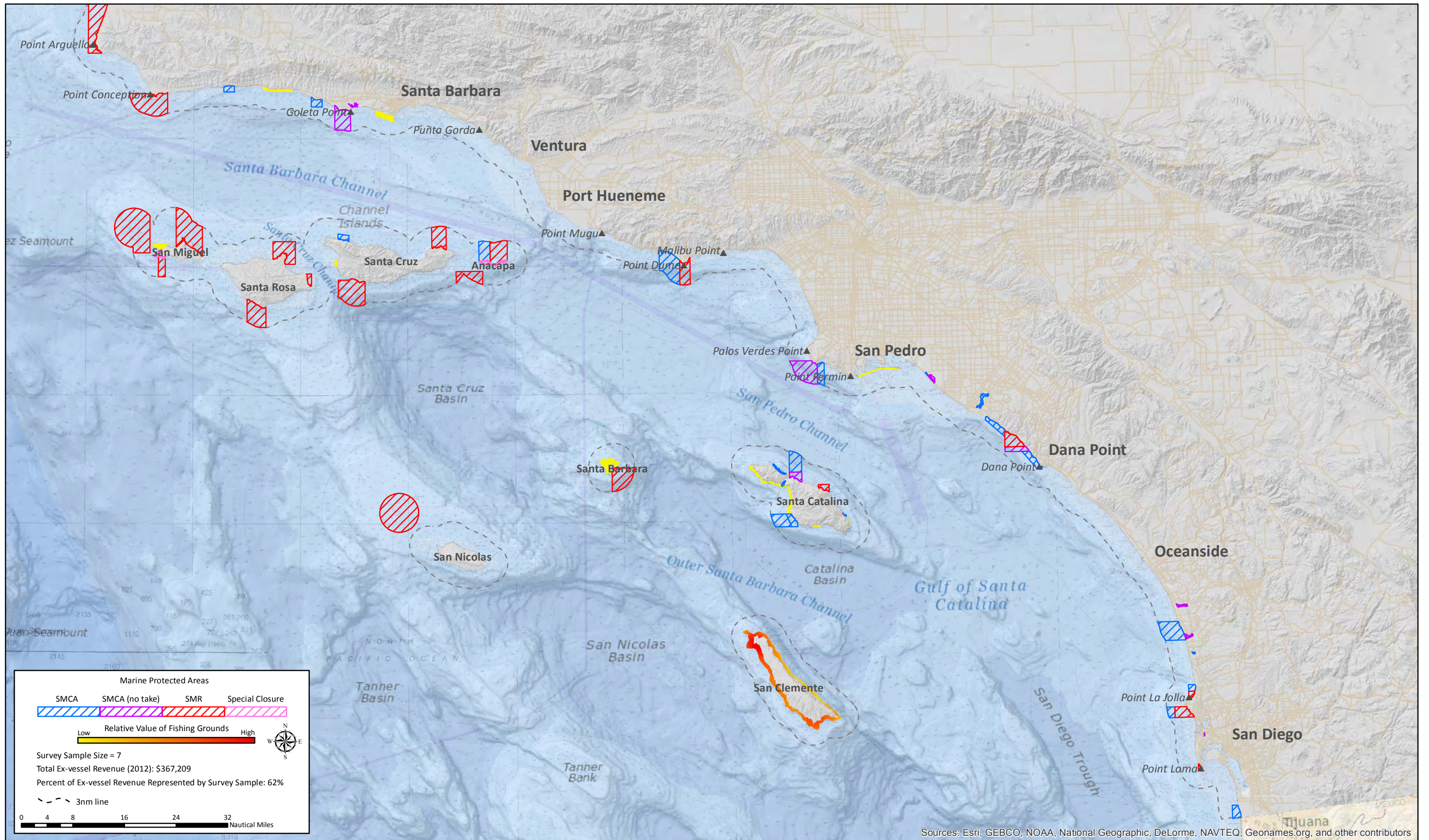
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

San Pedro – Rock crab–trap



California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

San Pedro – Sea cucumber–dive



Marine Protected Areas

SMCA SMCA (no take) SMR Special Closure

Low Relative Value of Fishing Grounds High

Survey Sample Size = 7
 Total Ex-vessel Revenue (2012): \$367,209
 Percent of Ex-vessel Revenue Represented by Survey Sample: 62%

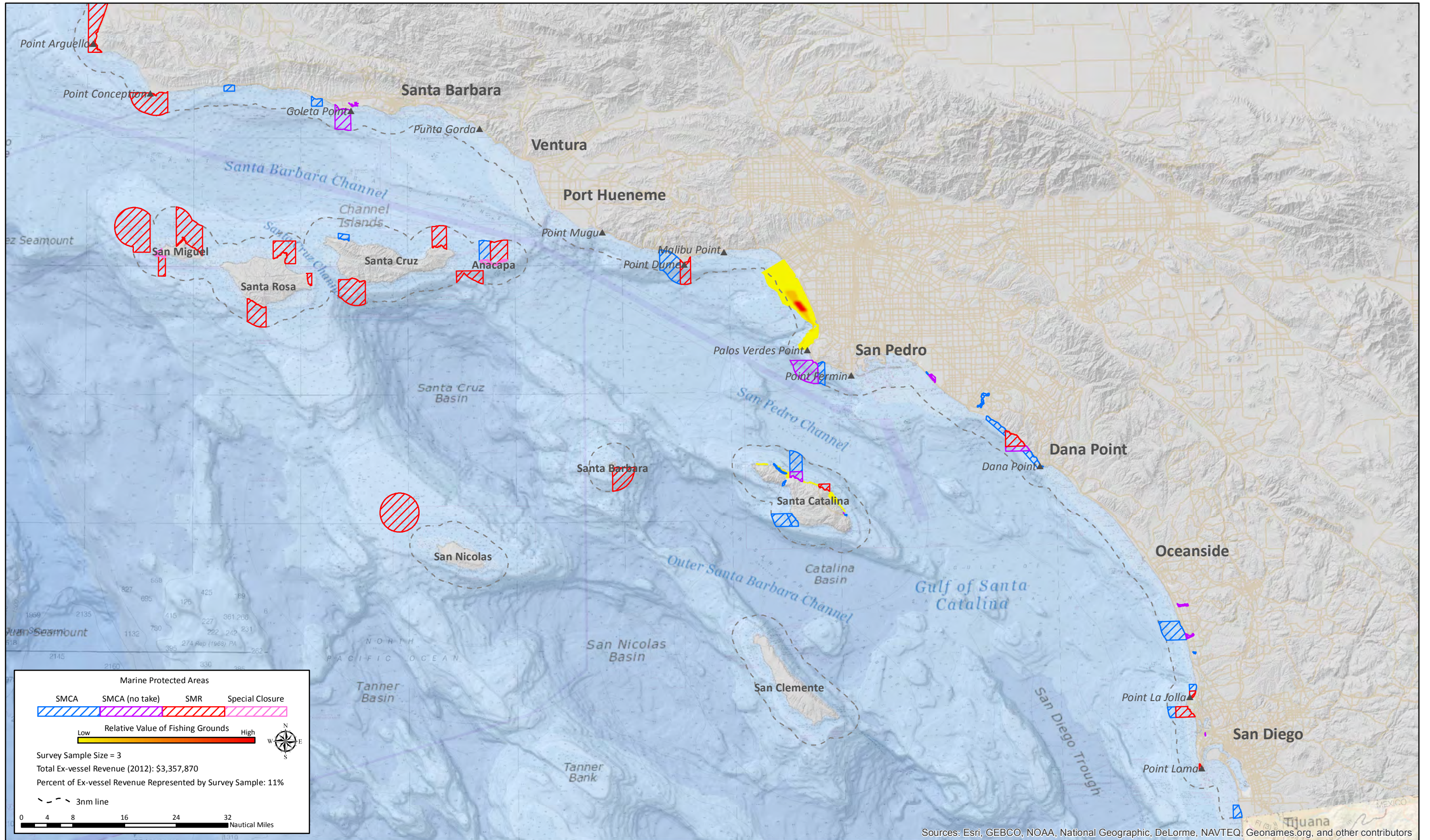
--- 3nm line

0 4 8 16 24 32 Nautical Miles

Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, NAVTEQ, Geonames.org, and other contributors

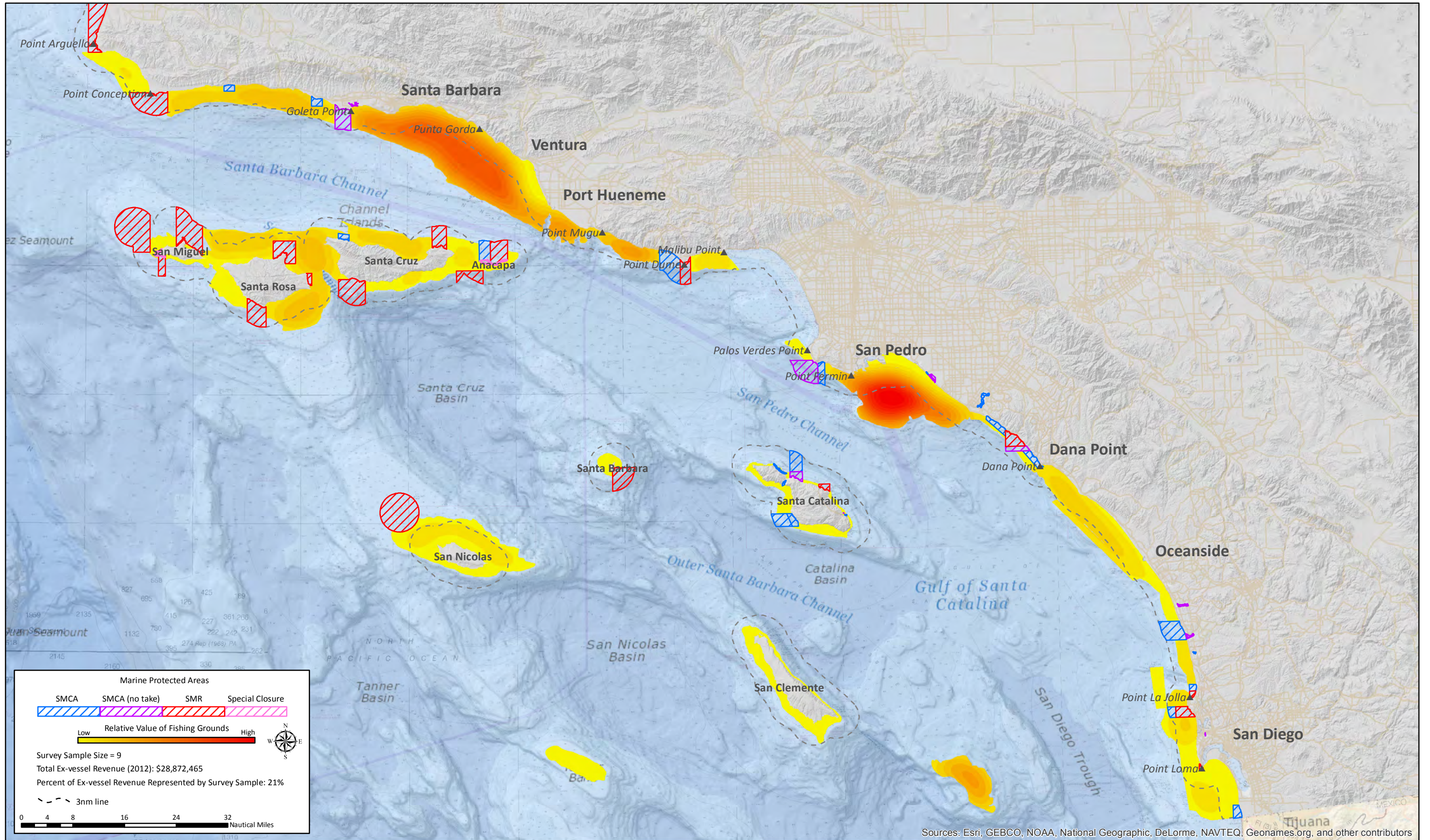
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

San Pedro – Market squid–brail



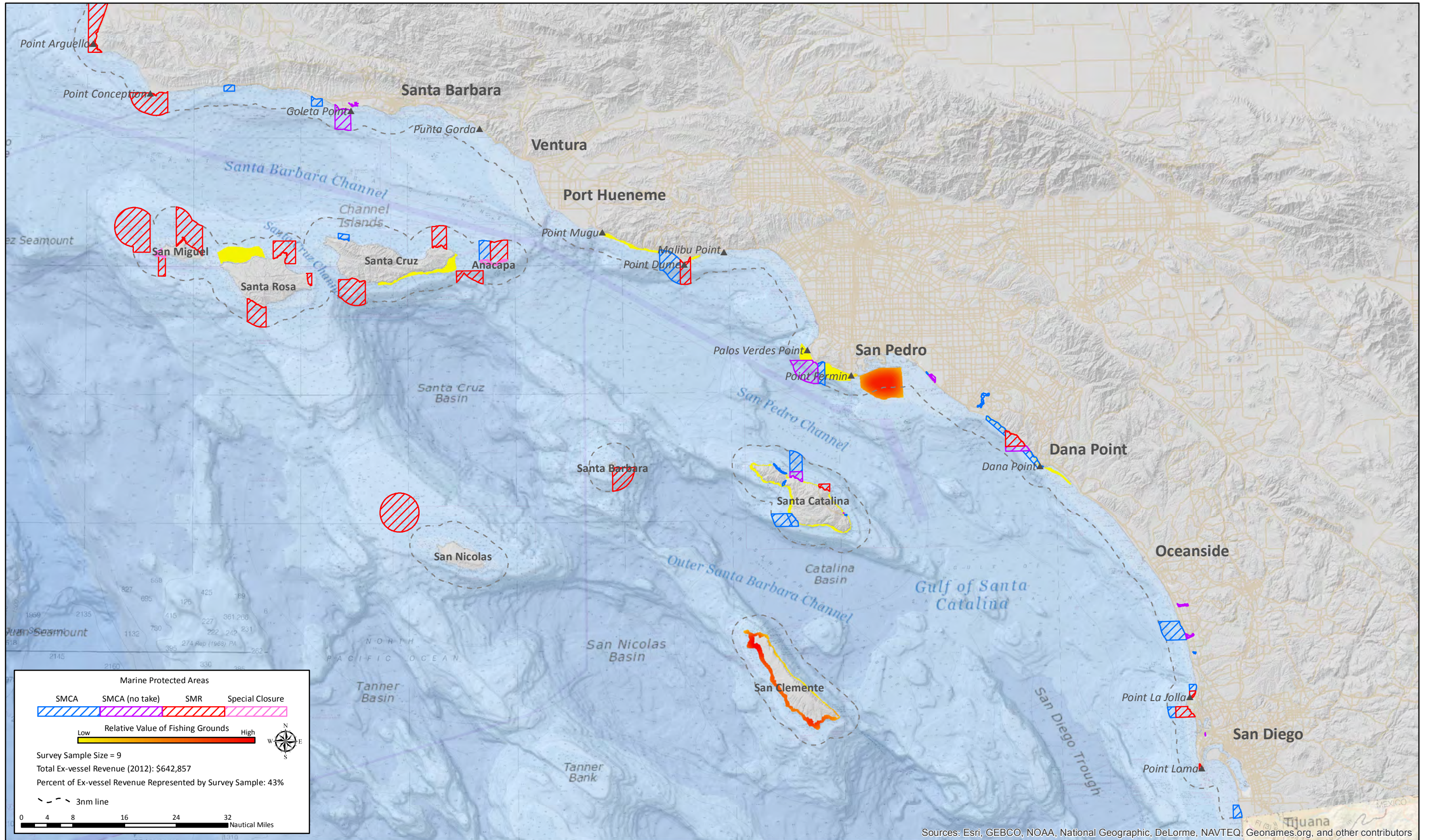
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

San Pedro – Market squid–seine



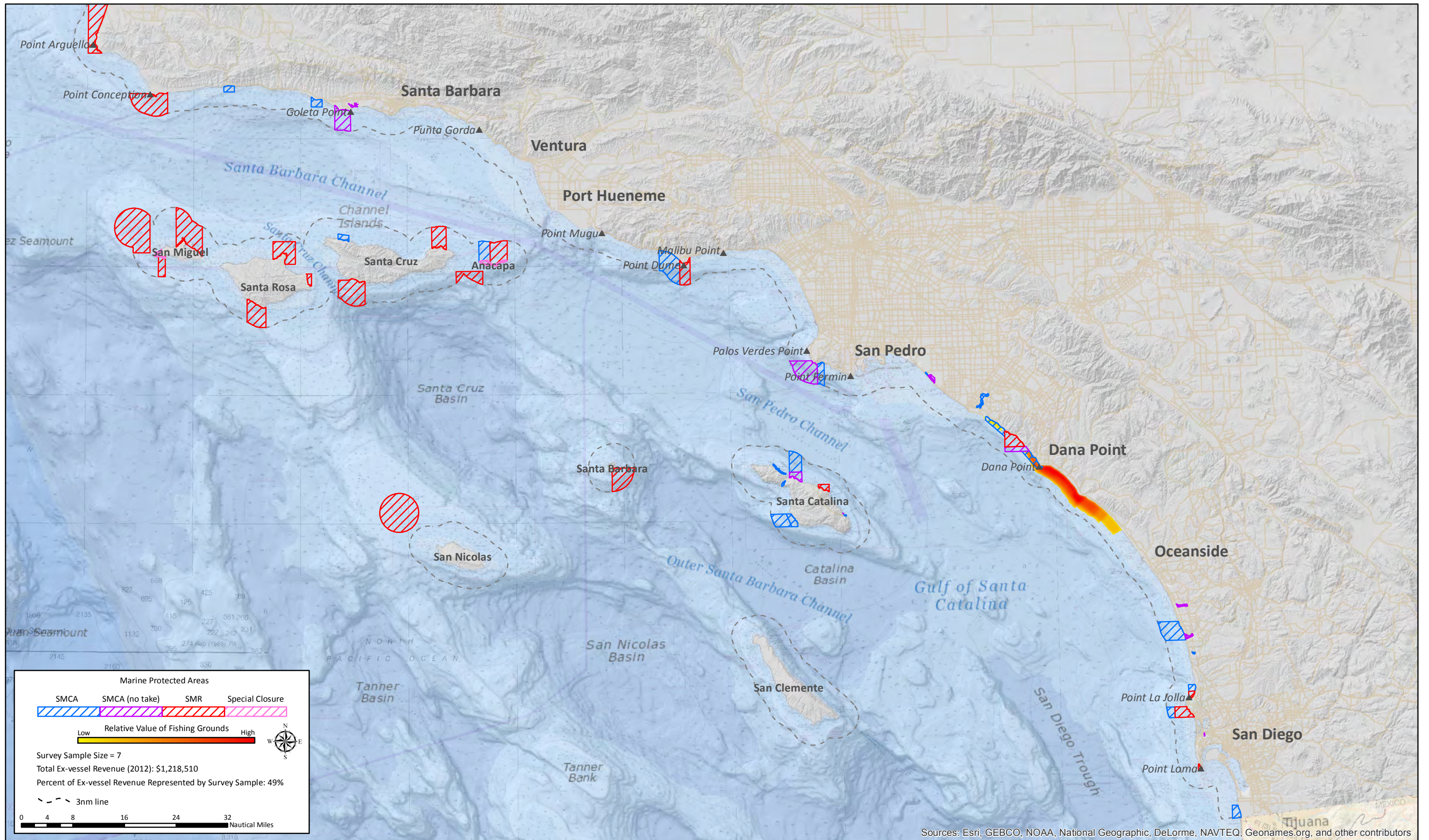
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

San Pedro – Urchin–dive



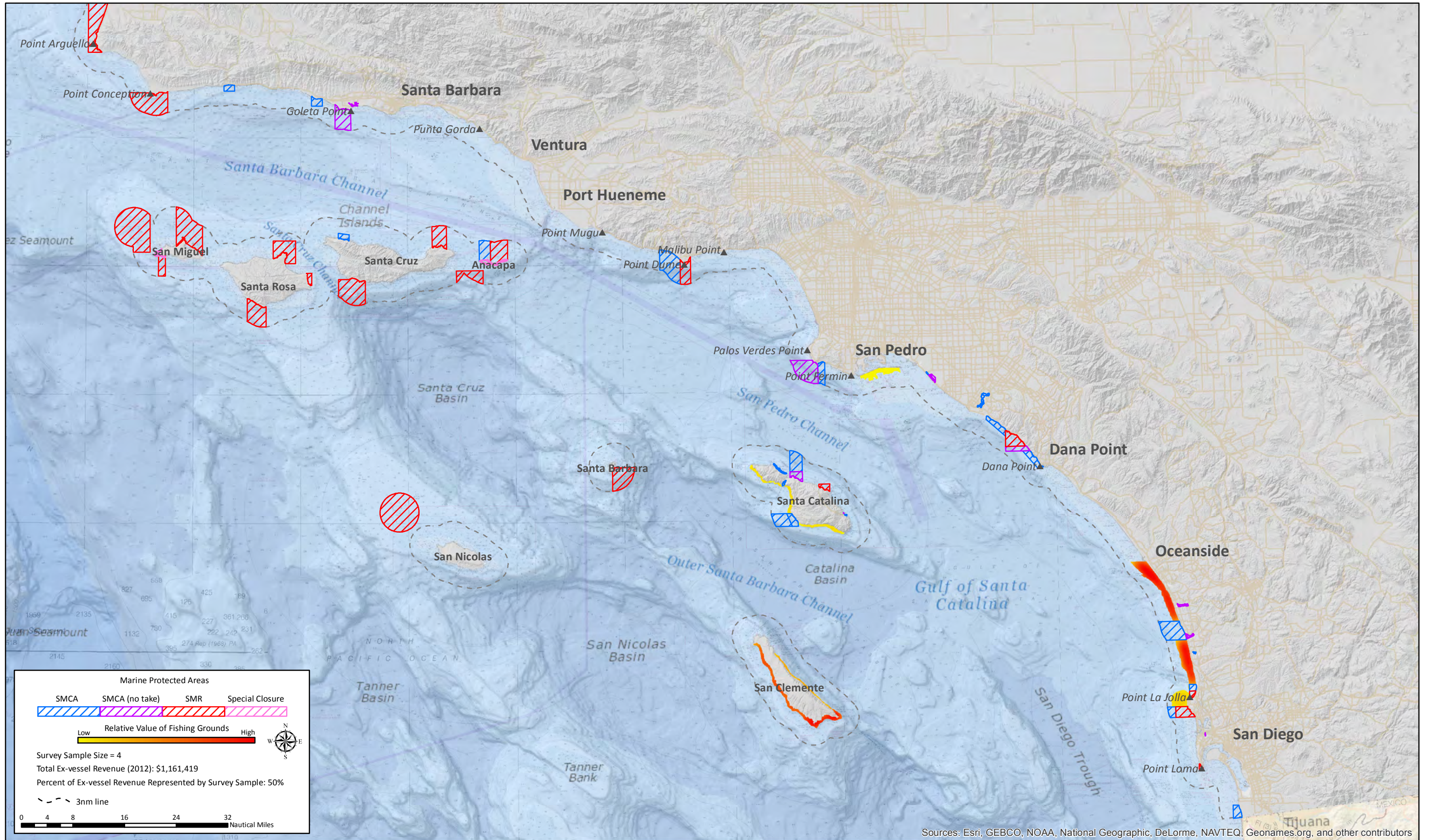
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Dana Point – Lobster-trap



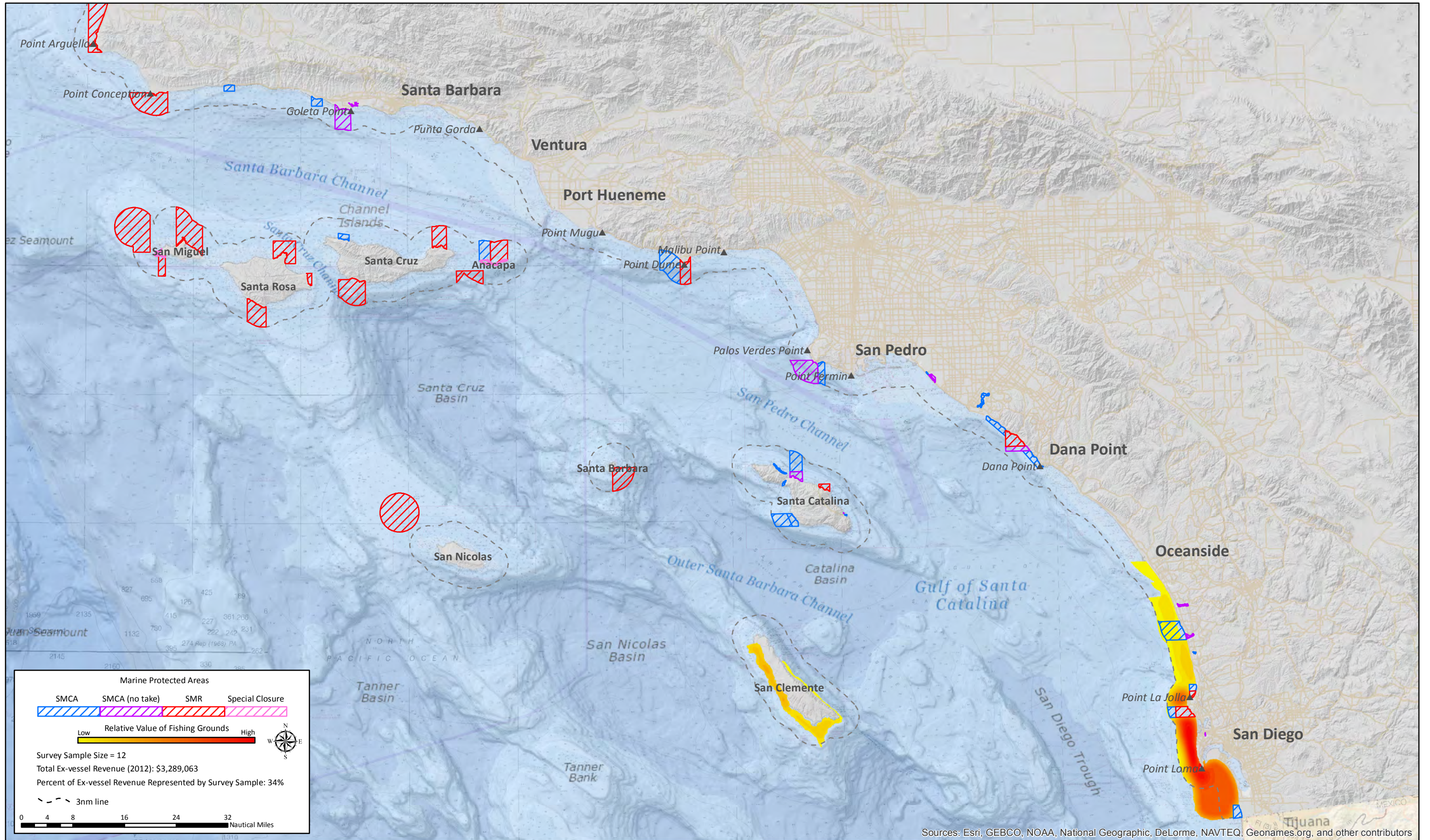
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

Oceanside – Lobster-trap



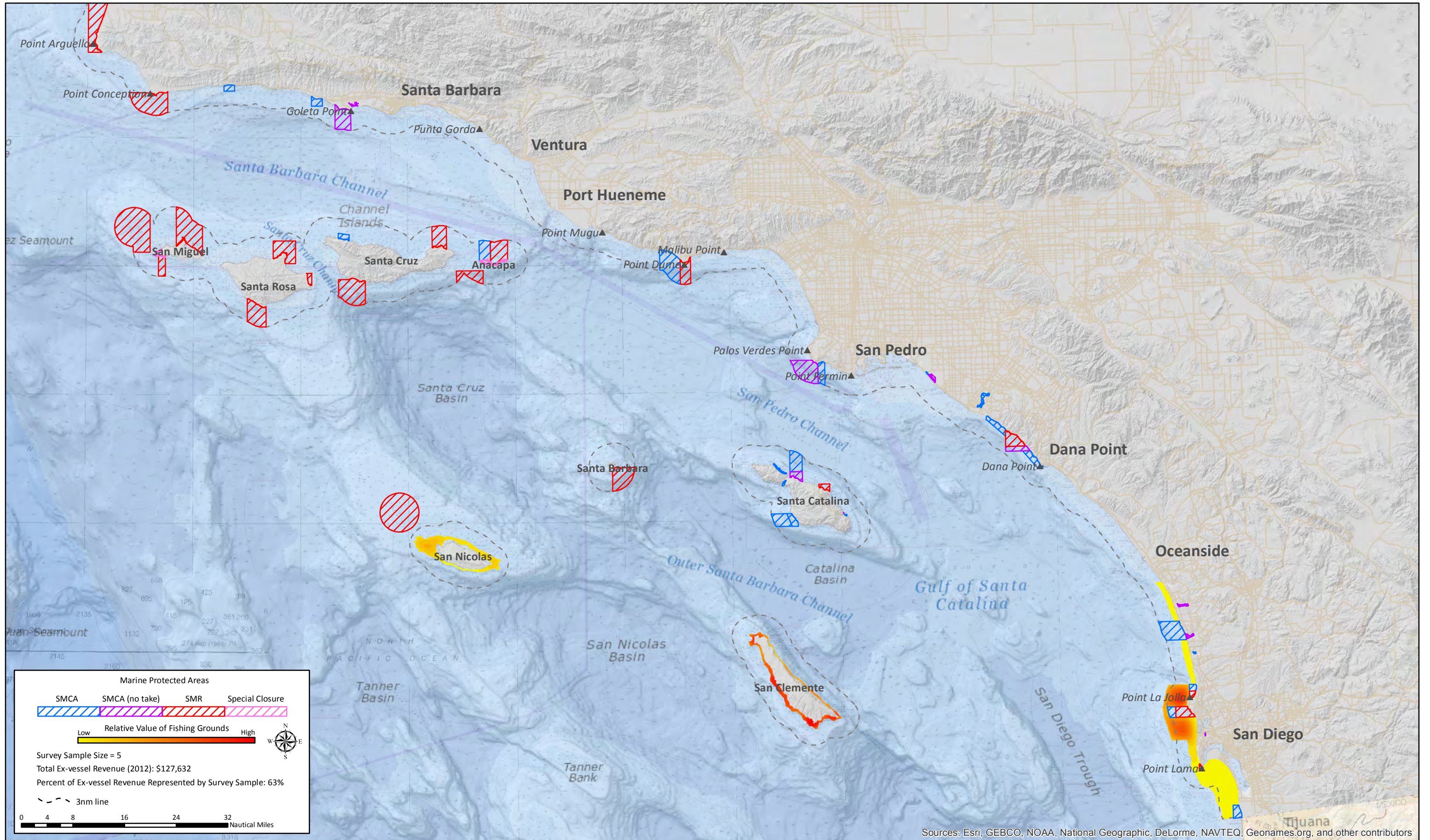
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

San Diego – Lobster-trap



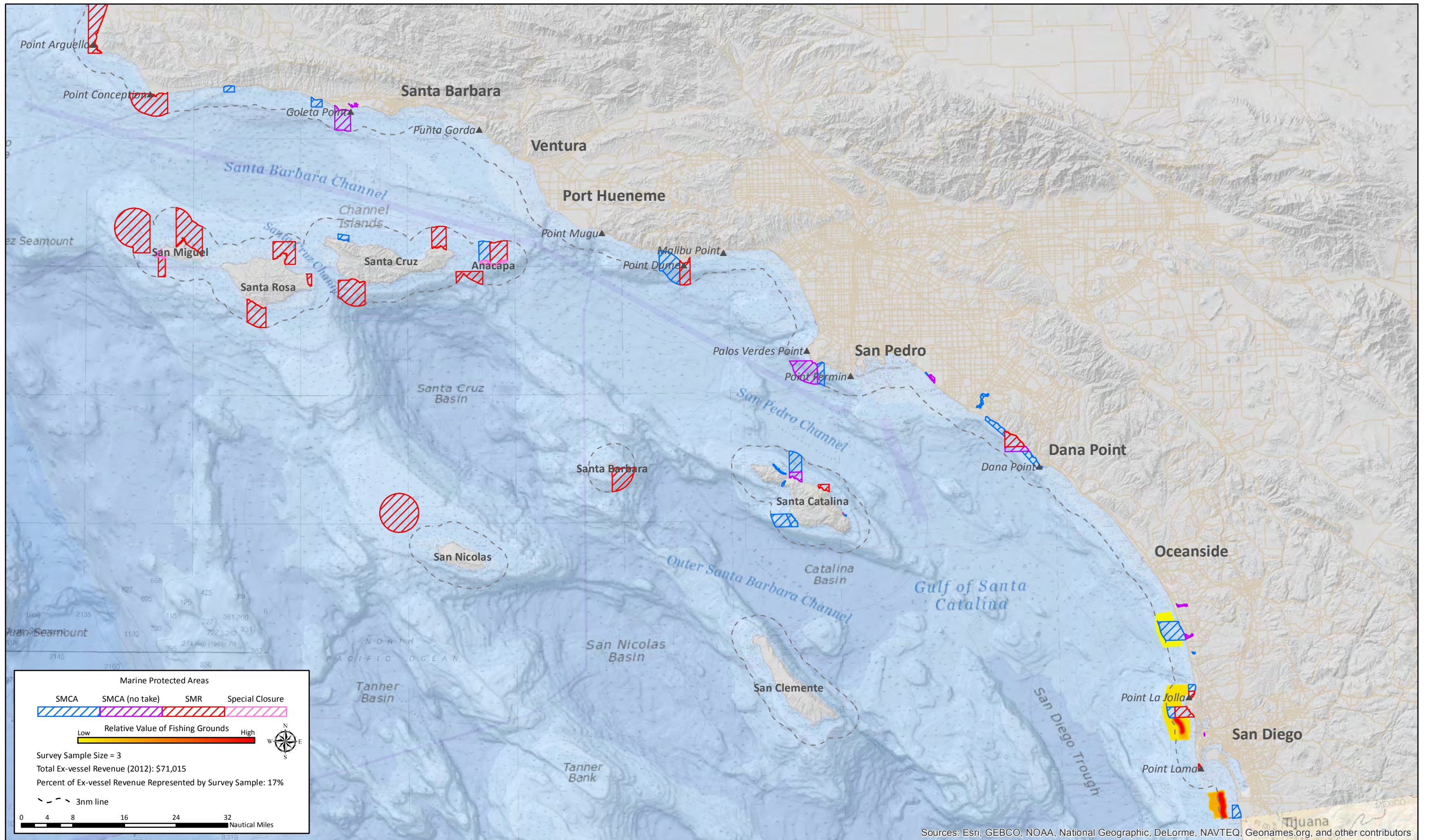
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

San Diego – Nearshore finfish–live–fixed gear



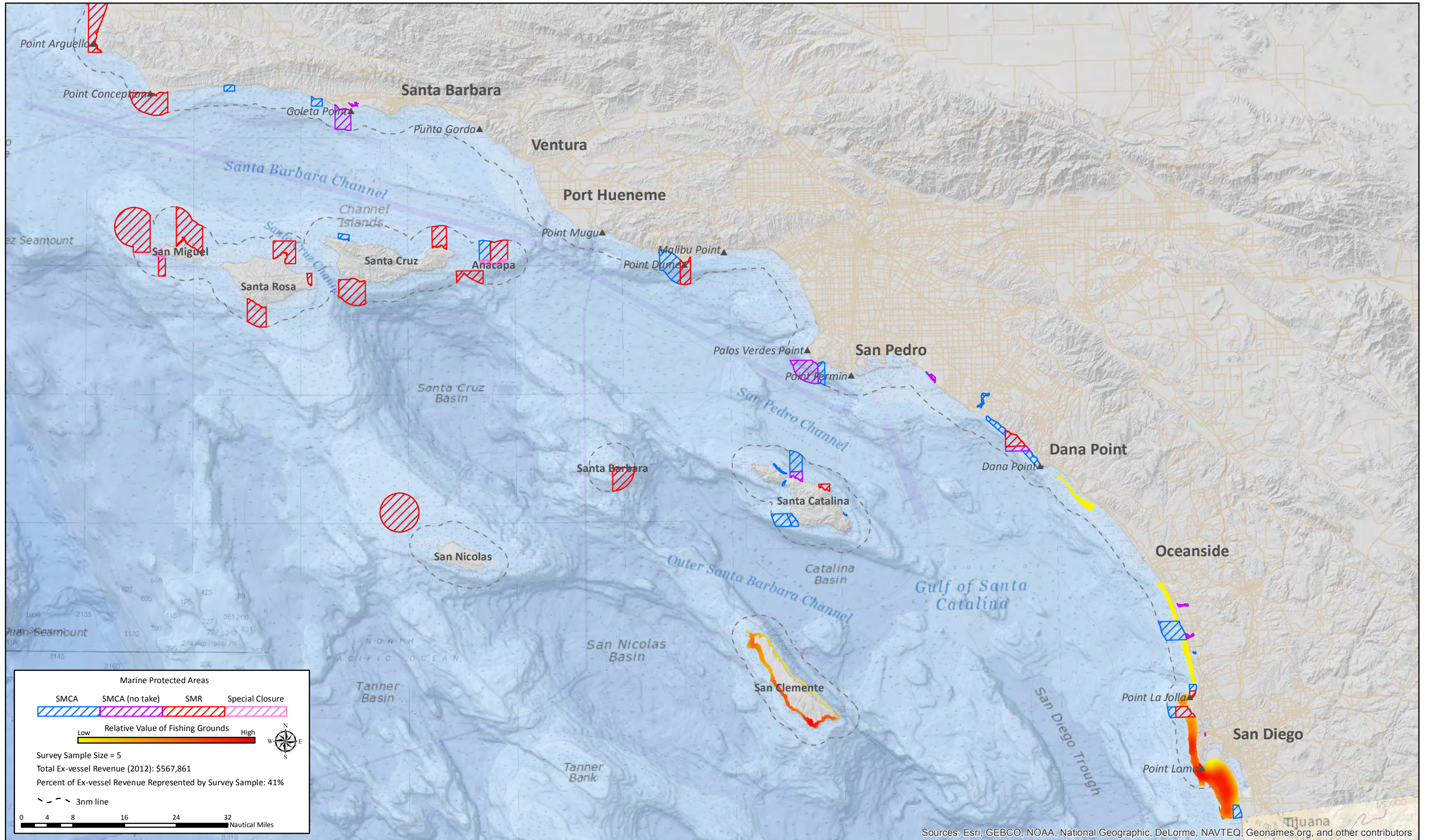
California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

San Diego – Rock crab-trap



California South Coast Post-MPA (2012) Commercial Fishing Grounds and Landings

San Diego – Urchin-diver



MAP APPENDIX

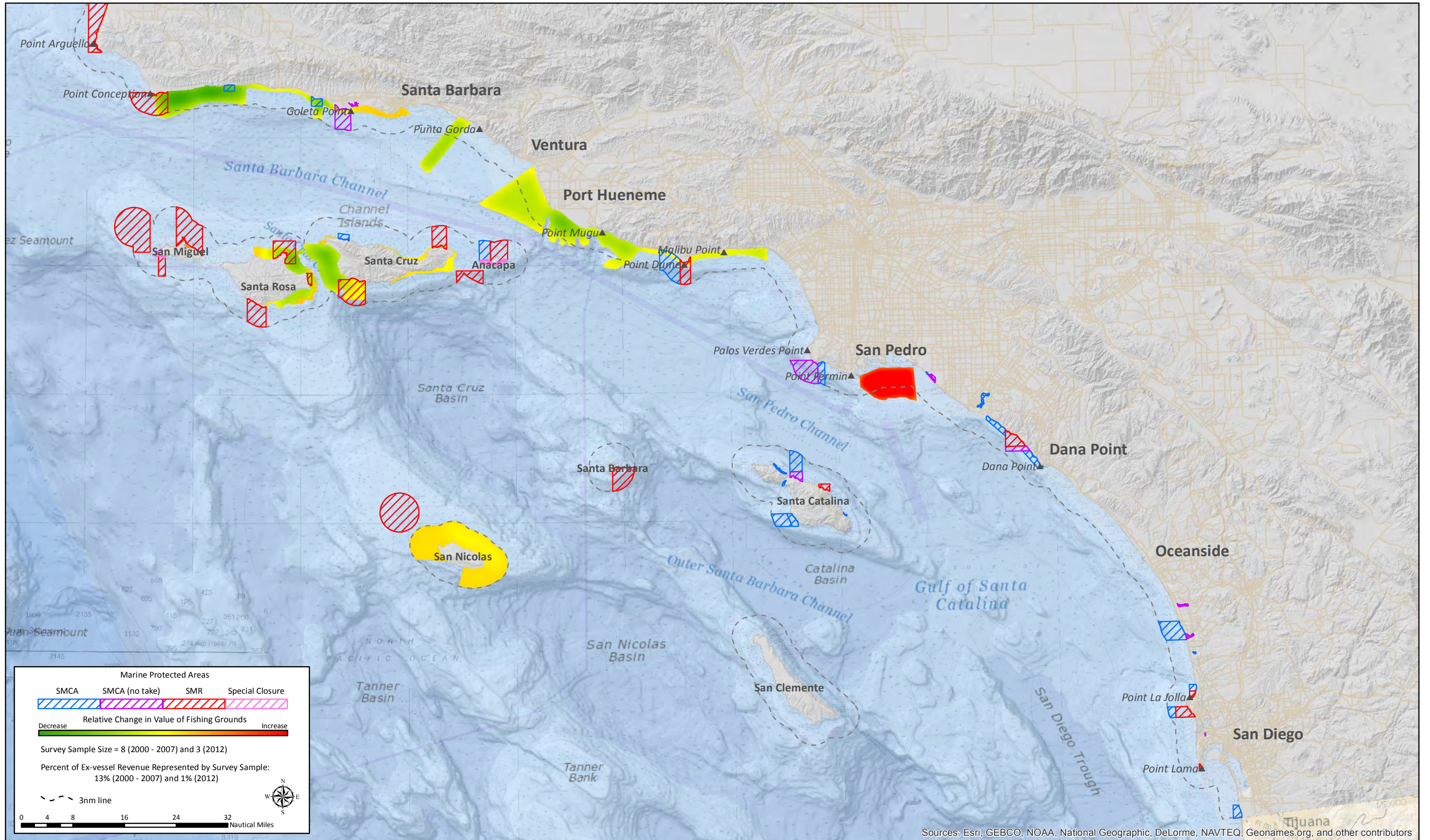
Commercial Fishing
Spatial Change Maps:

Change between Pre MPA (2000-2007 yearly average) and
Post MPA (2012)

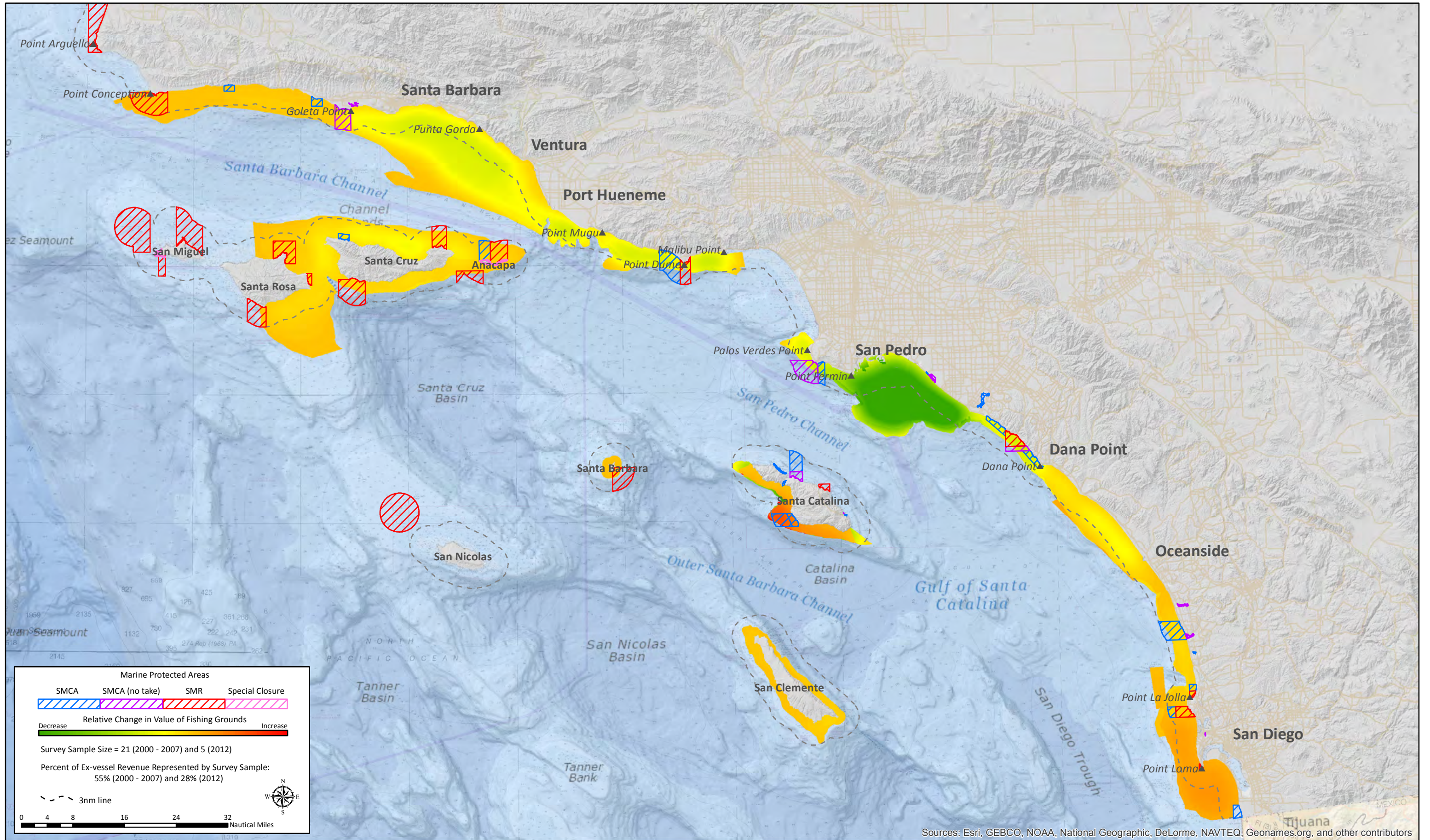
POINT 97

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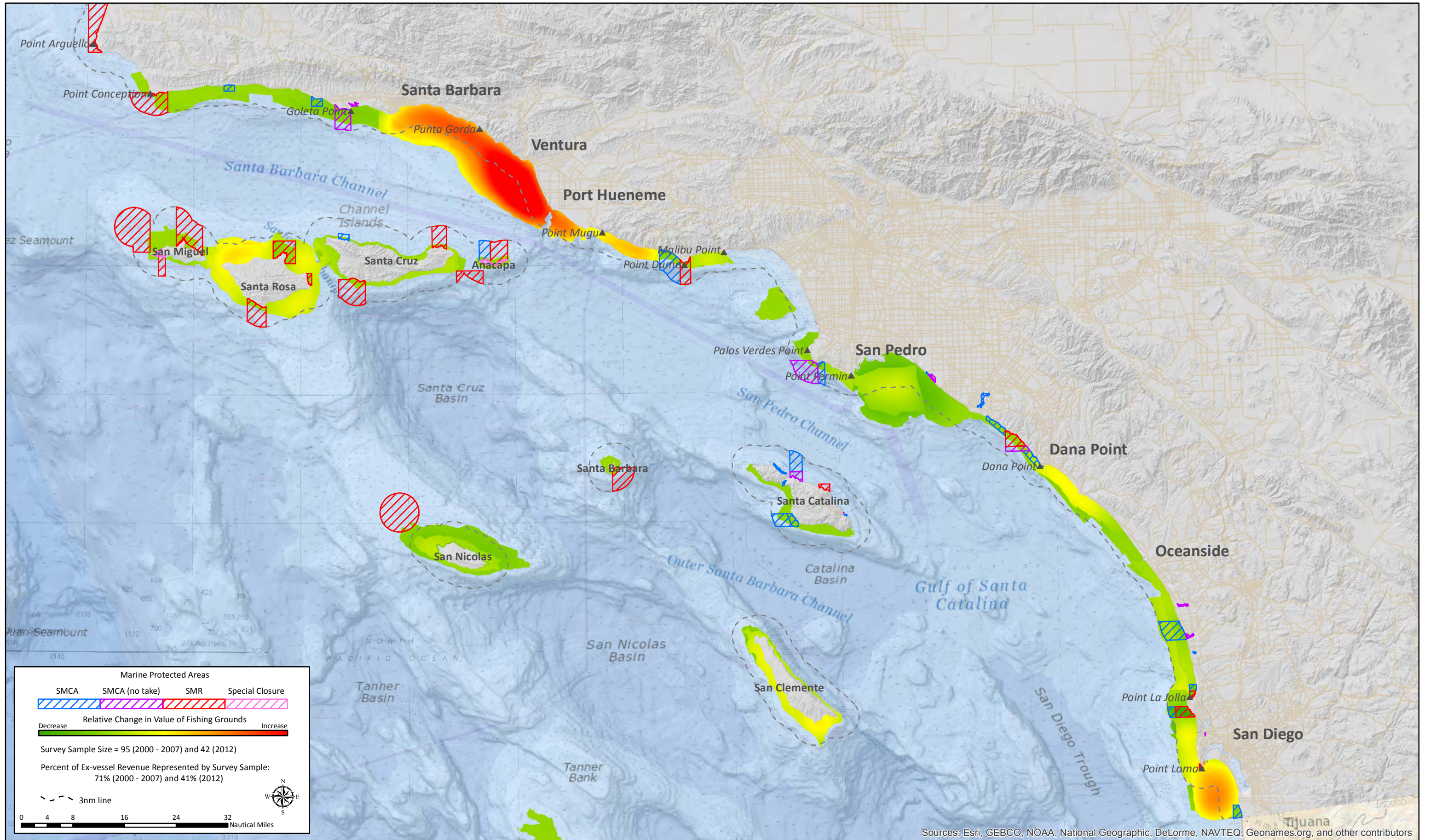
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – All Ports – California halibut–hook & line



California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – All Ports – Coastal pelagics–seine



California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – All Ports – Lobster-trap



Marine Protected Areas

SMCA	SMCA (no take)	SMR	Special Closure

Relative Change in Value of Fishing Grounds

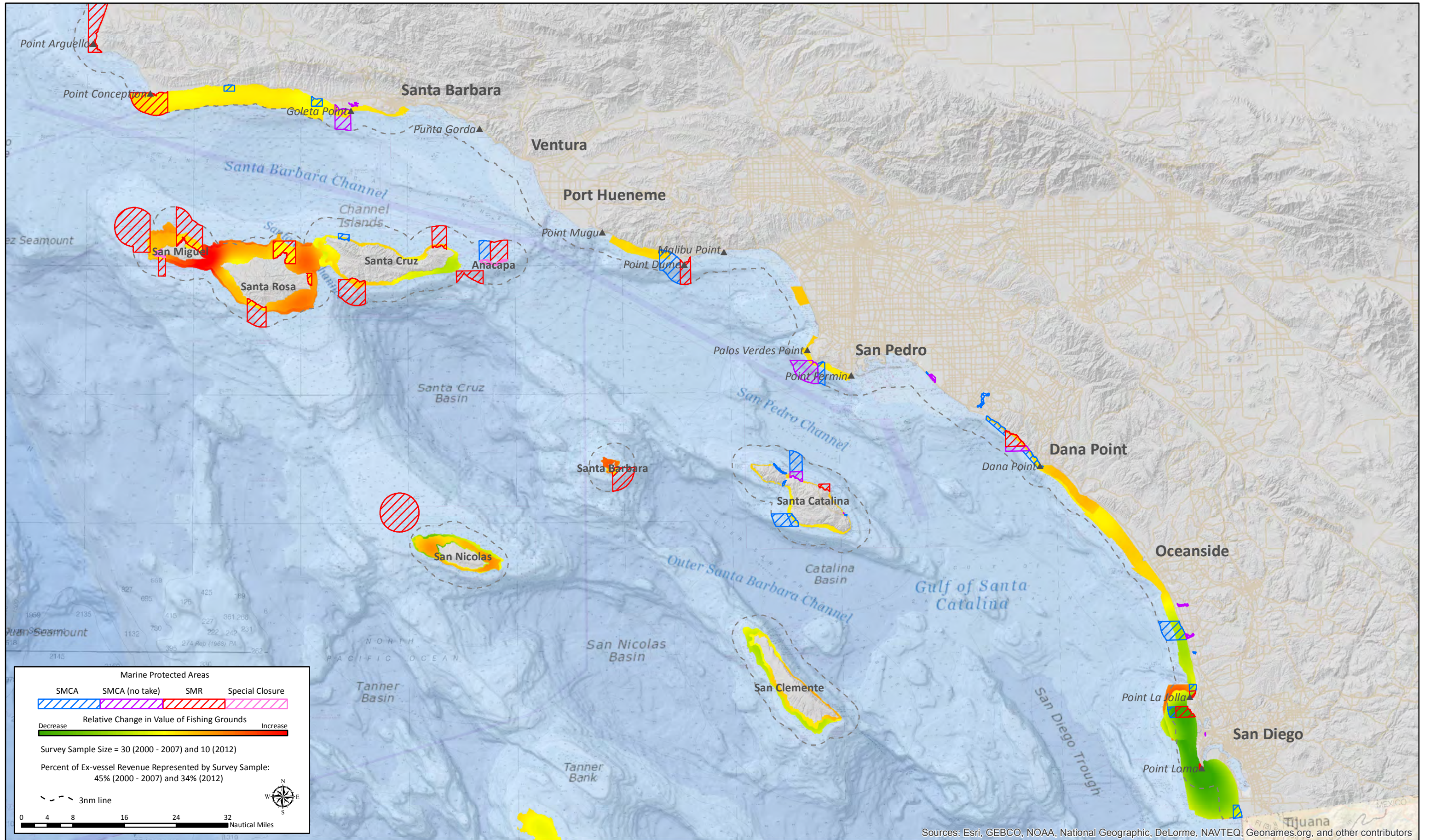
Decrease Increase

Survey Sample Size = 95 (2000 - 2007) and 42 (2012)
 Percent of Ex-vessel Revenue Represented by Survey Sample:
 71% (2000 - 2007) and 41% (2012)

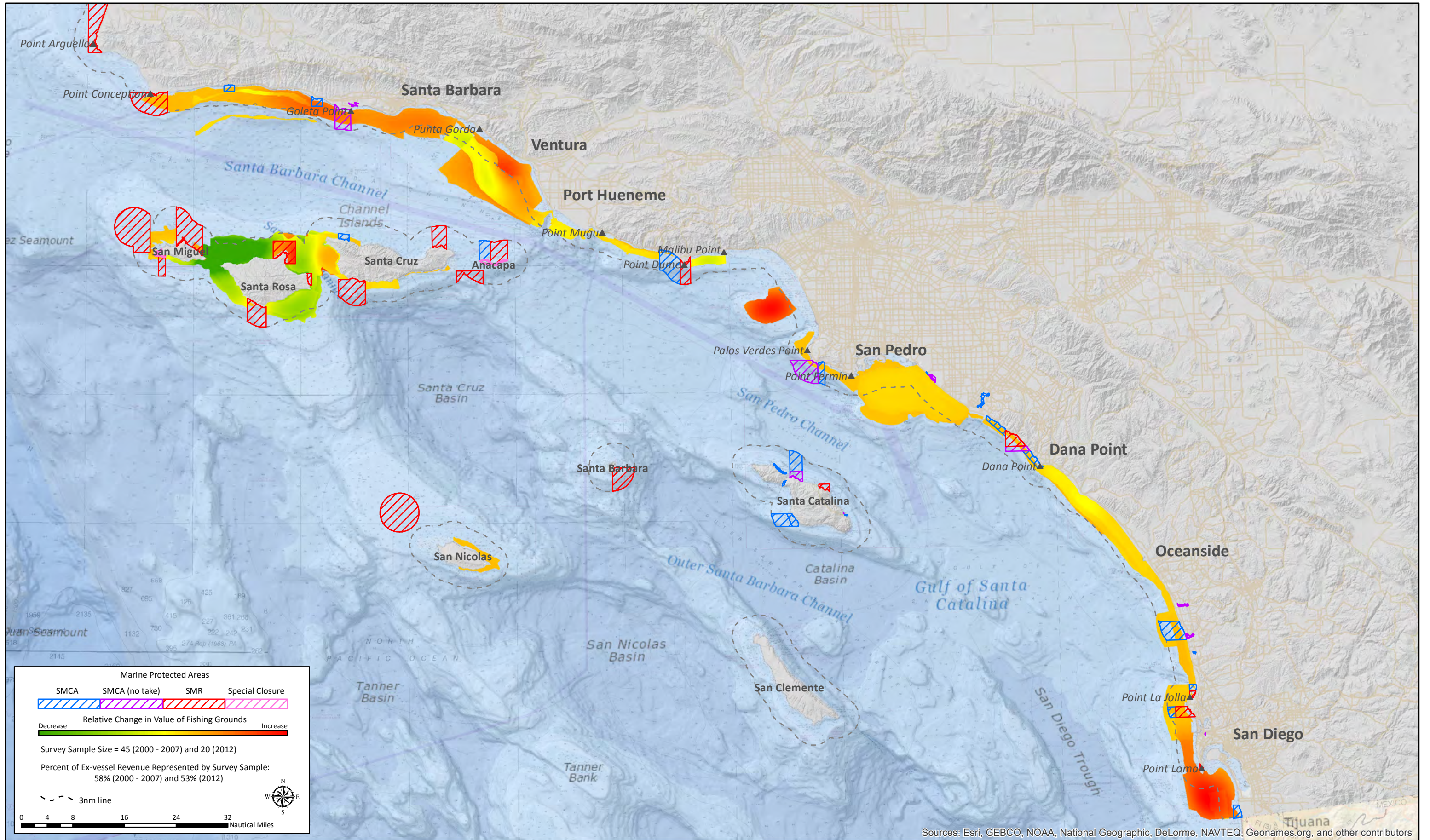
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Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, NAVTEQ, Geonames.org, and other contributors

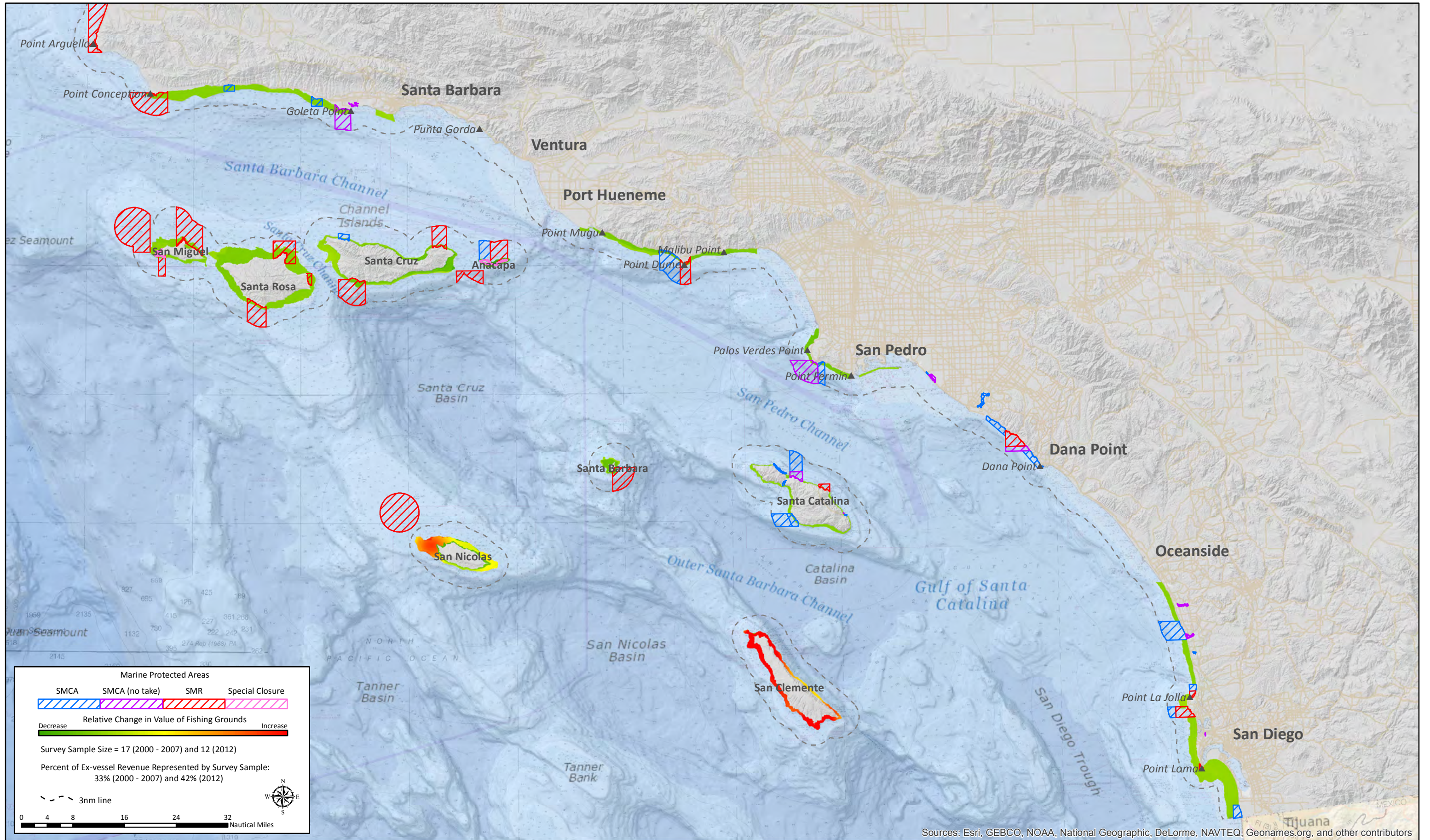
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – All Ports – Nearshore finfish–live–fixed gear



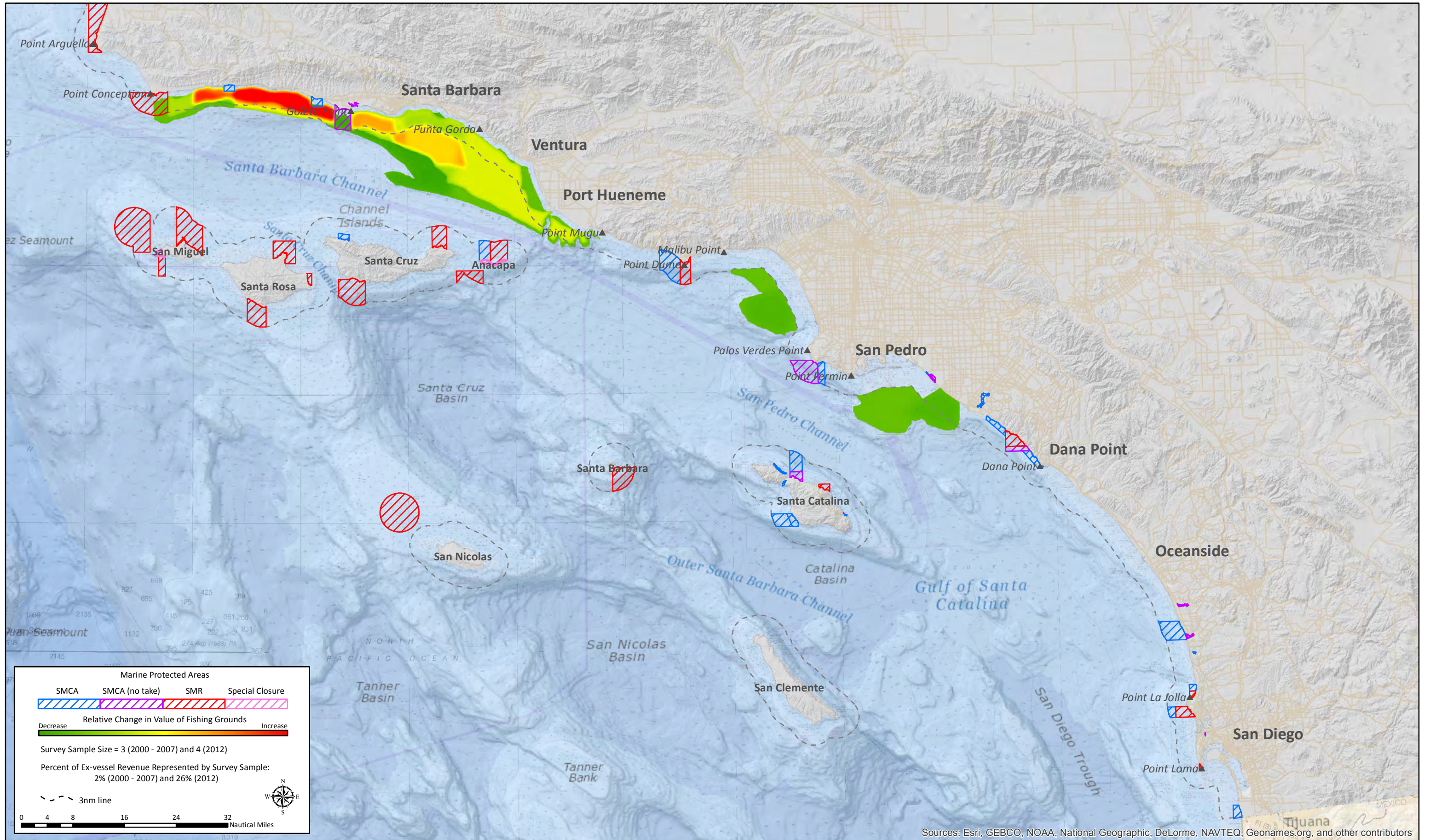
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – All Ports – Rock crab-trap



California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – All Ports – Sea cucumber–dive



California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – All Ports – Sea cucumber–trawl



Marine Protected Areas

SMCA	SMCA (no take)	SMR	Special Closure

Relative Change in Value of Fishing Grounds

Decrease Increase

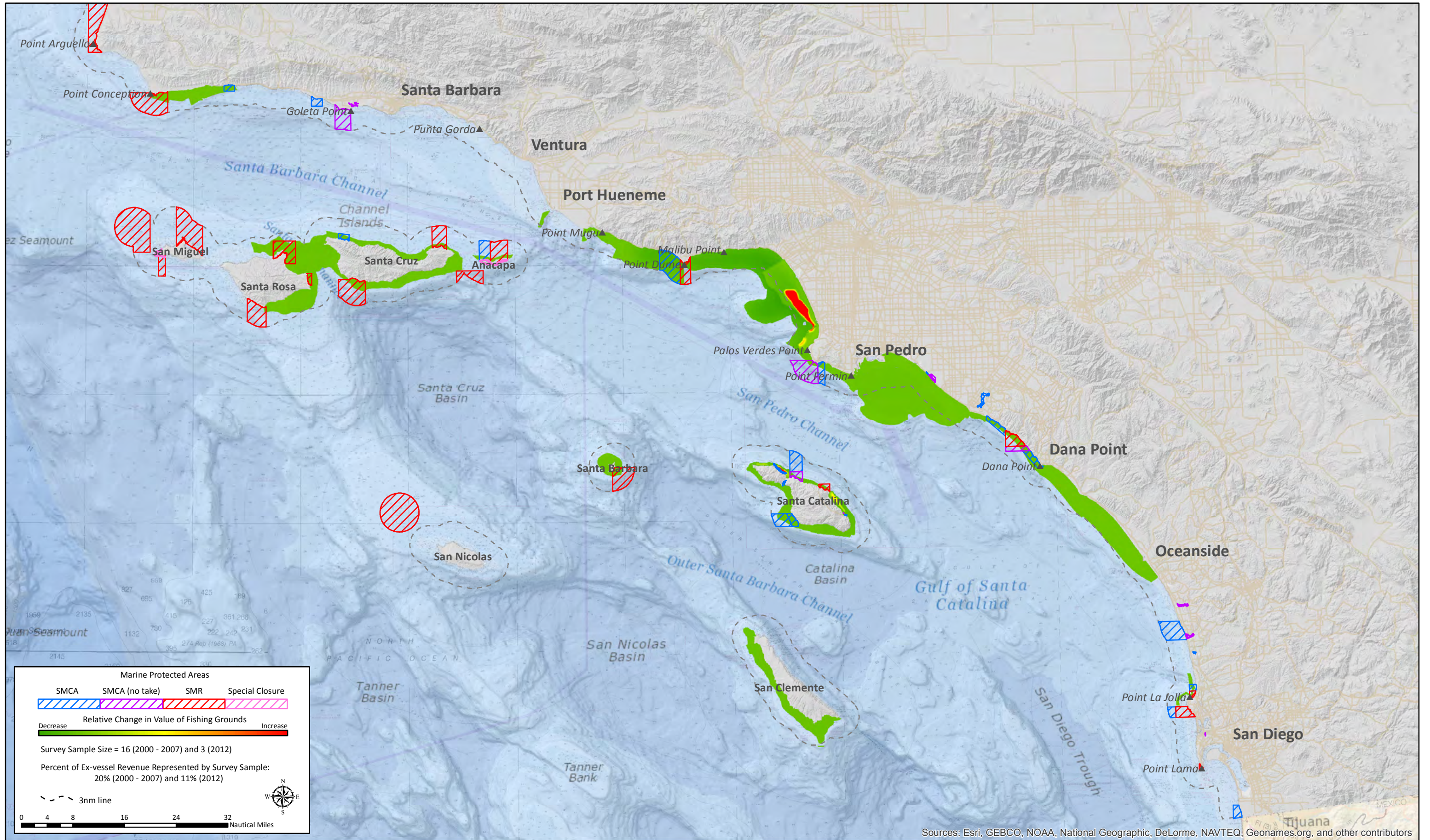
Survey Sample Size = 3 (2000 - 2007) and 4 (2012)

Percent of Ex-vessel Revenue Represented by Survey Sample:
2% (2000 - 2007) and 26% (2012)

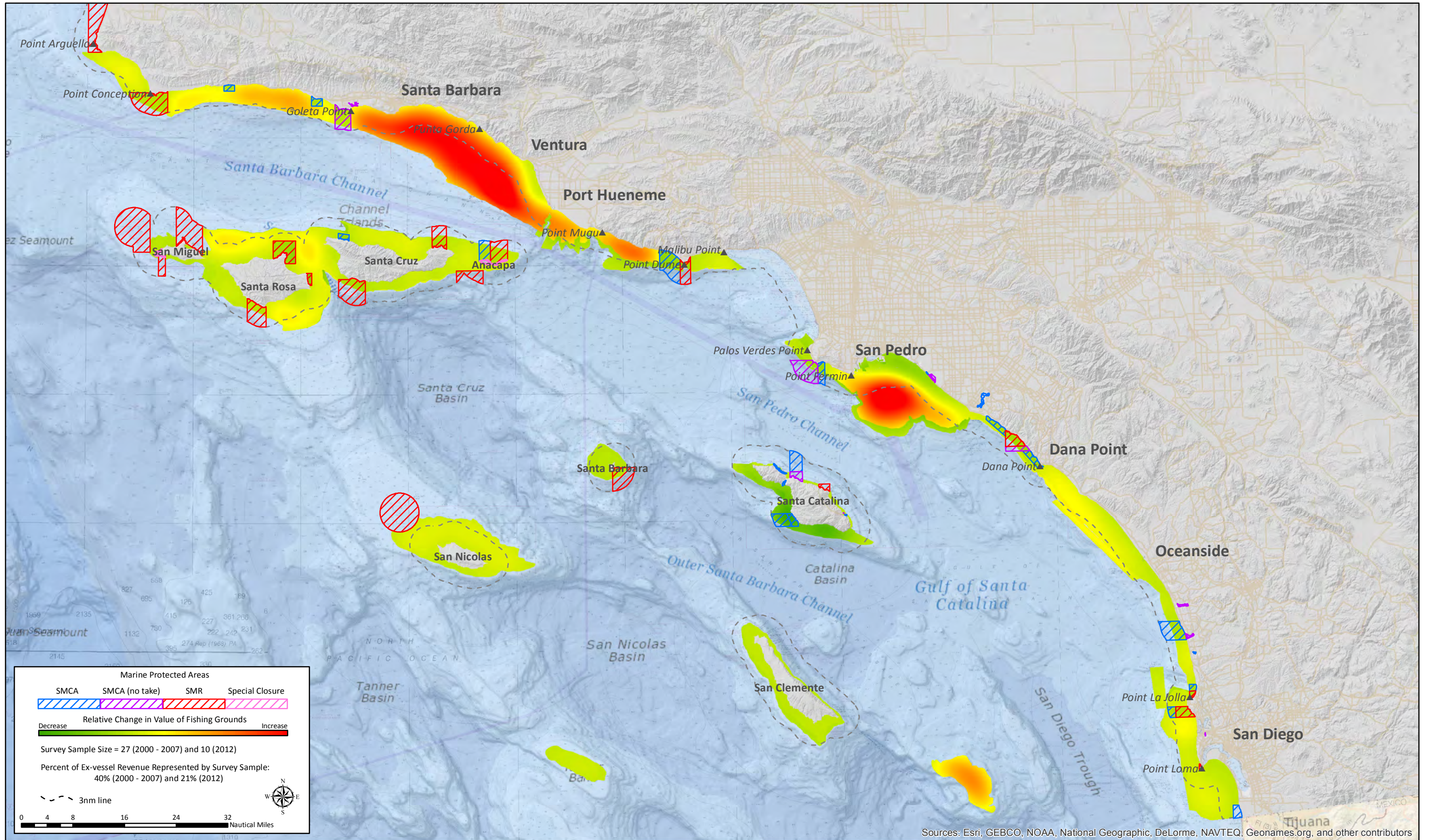
3nm line

Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, NAVTEQ, Geonames.org, and other contributors

California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – All Ports – Market squid–brail



California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – All Ports – Market squid-seine



Marine Protected Areas

SMCA	SMCA (no take)	SMR	Special Closure

Relative Change in Value of Fishing Grounds

Decrease Increase

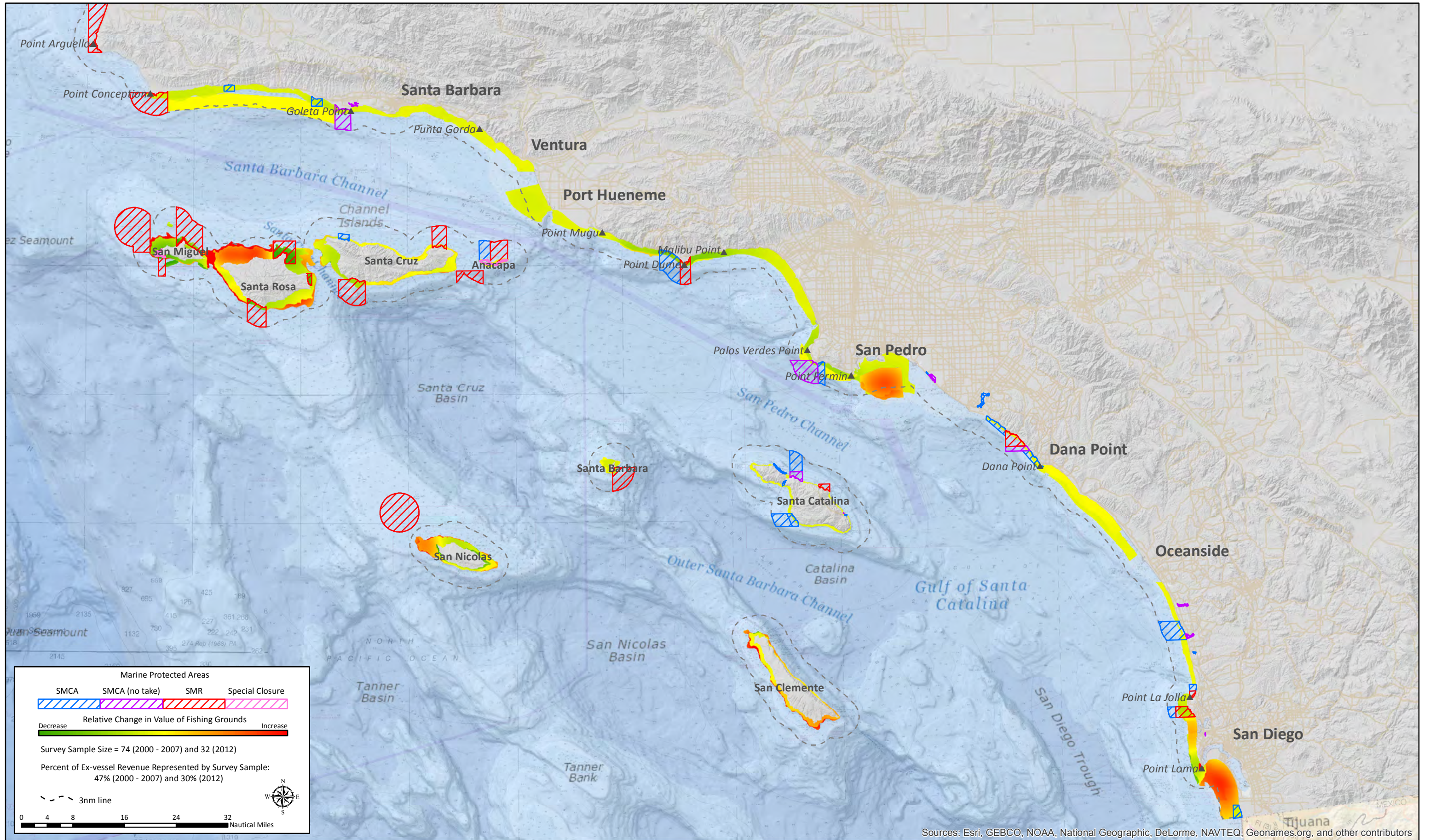
Survey Sample Size = 27 (2000 - 2007) and 10 (2012)

Percent of Ex-vessel Revenue Represented by Survey Sample:
40% (2000 - 2007) and 21% (2012)

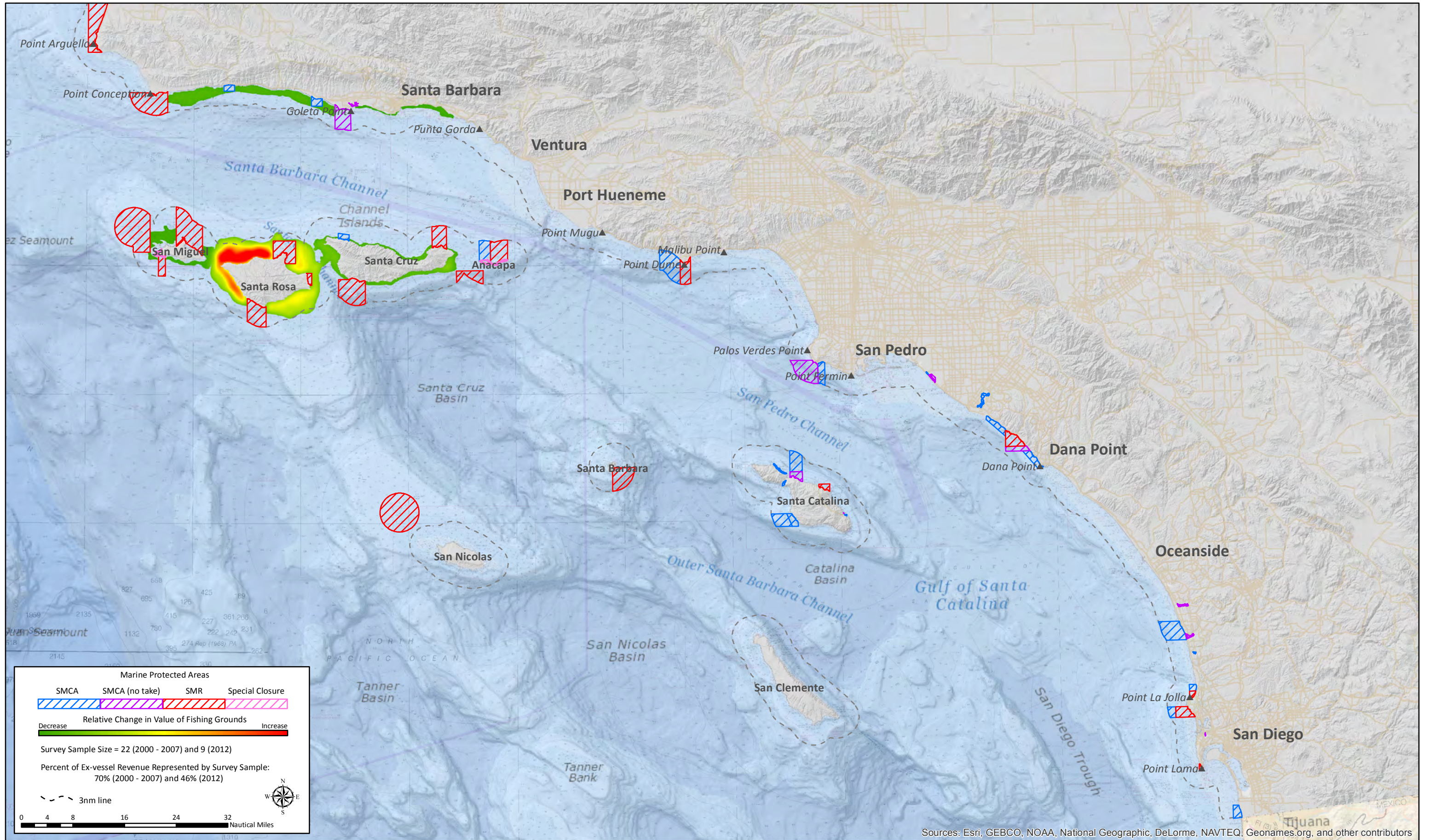
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Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, NAVTEQ, Geonames.org, and other contributors

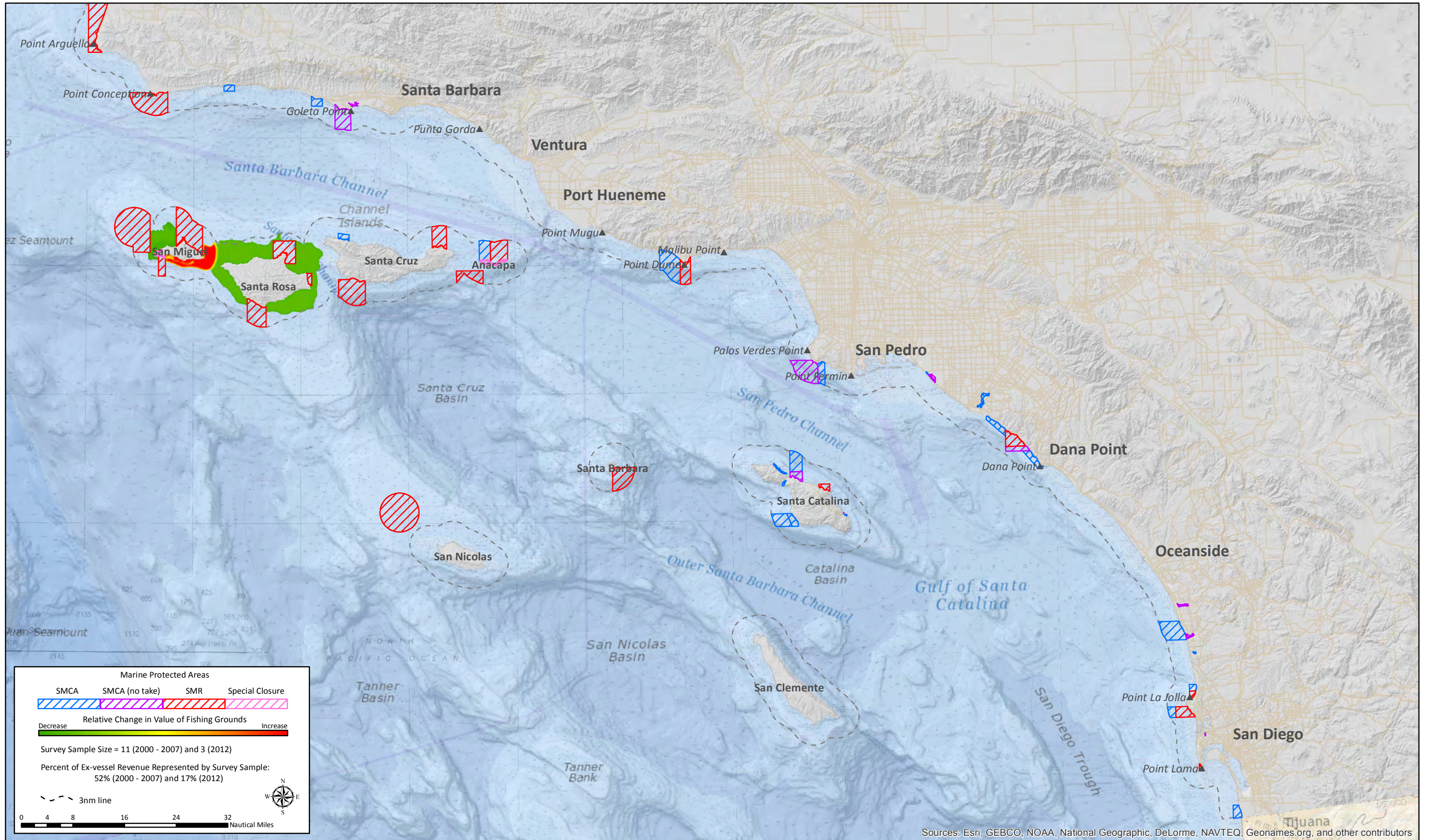
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – All Ports – Urchin-diver



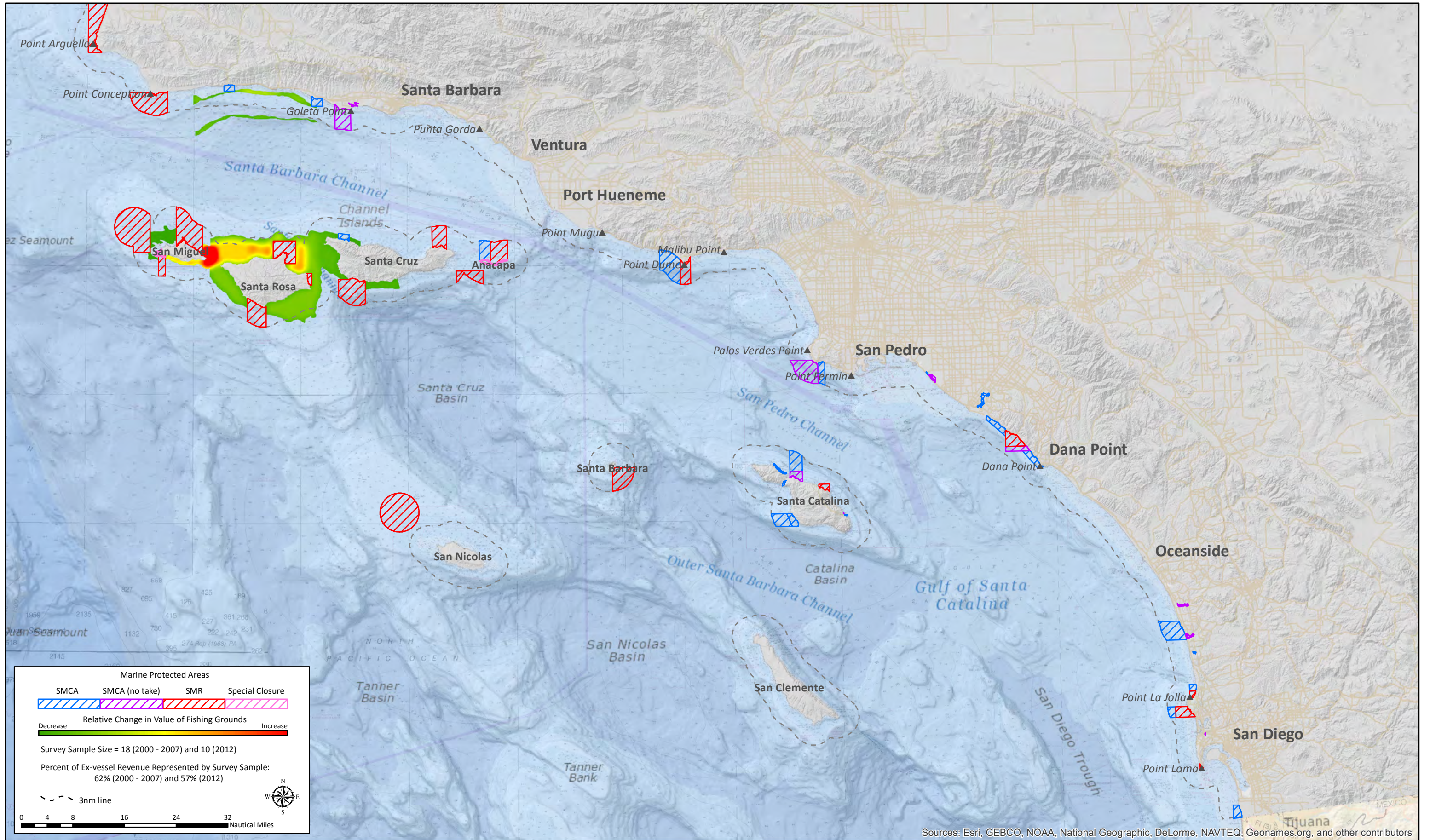
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – Santa Barbara – Lobster-trap



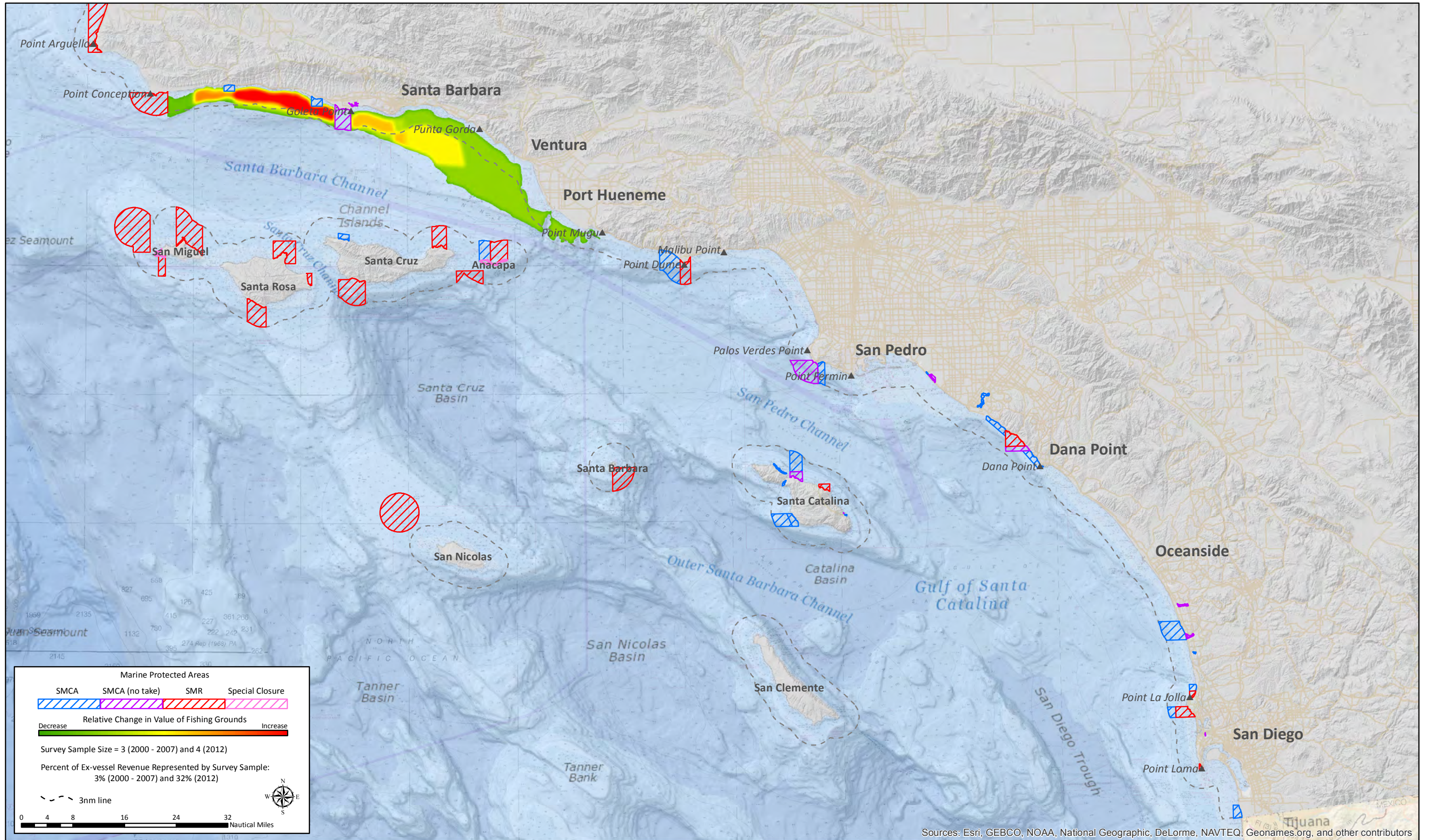
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – Santa Barbara – Nearshore finfish–live–fixed gear



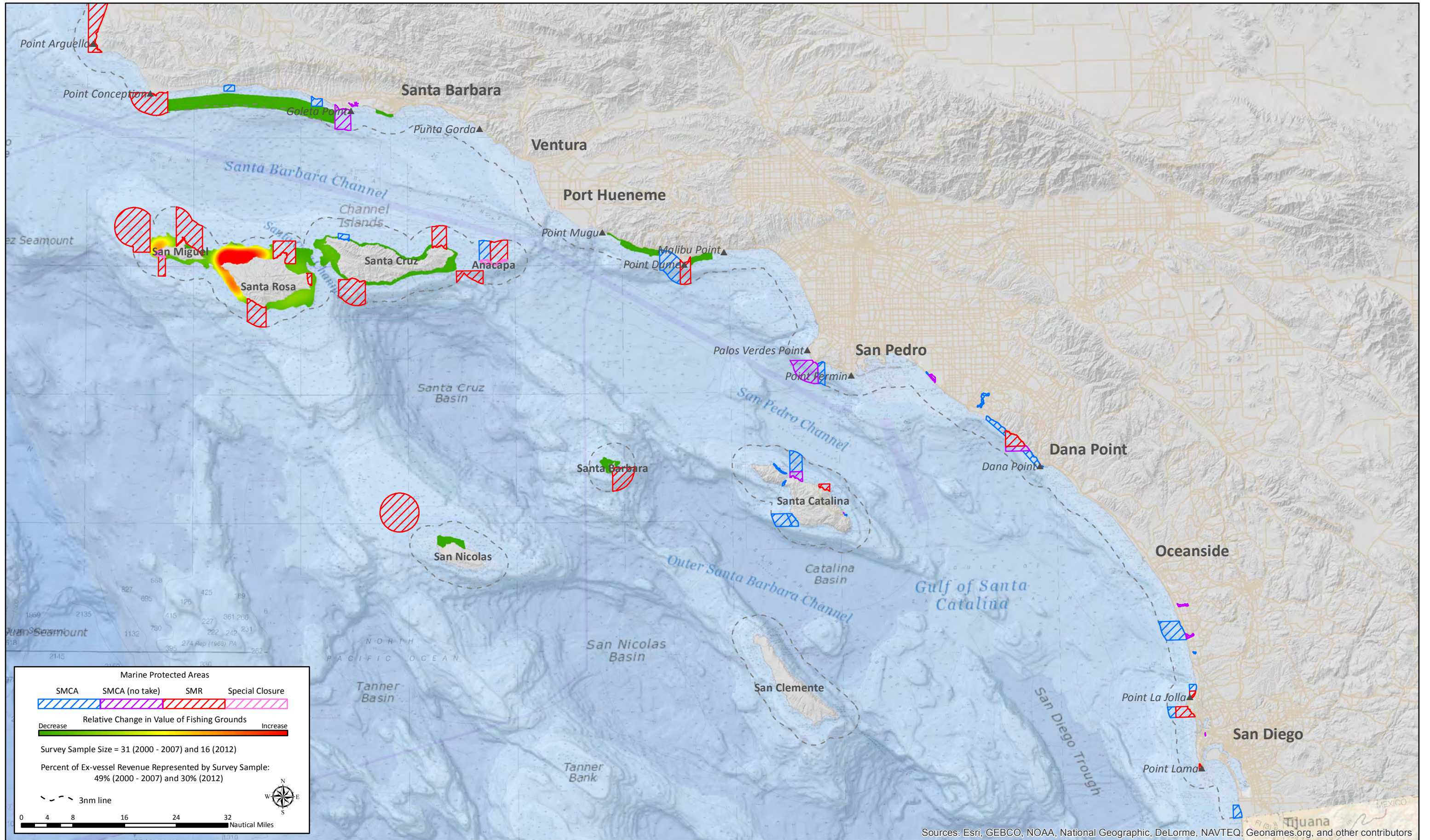
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – Santa Barbara – Rock crab–trap



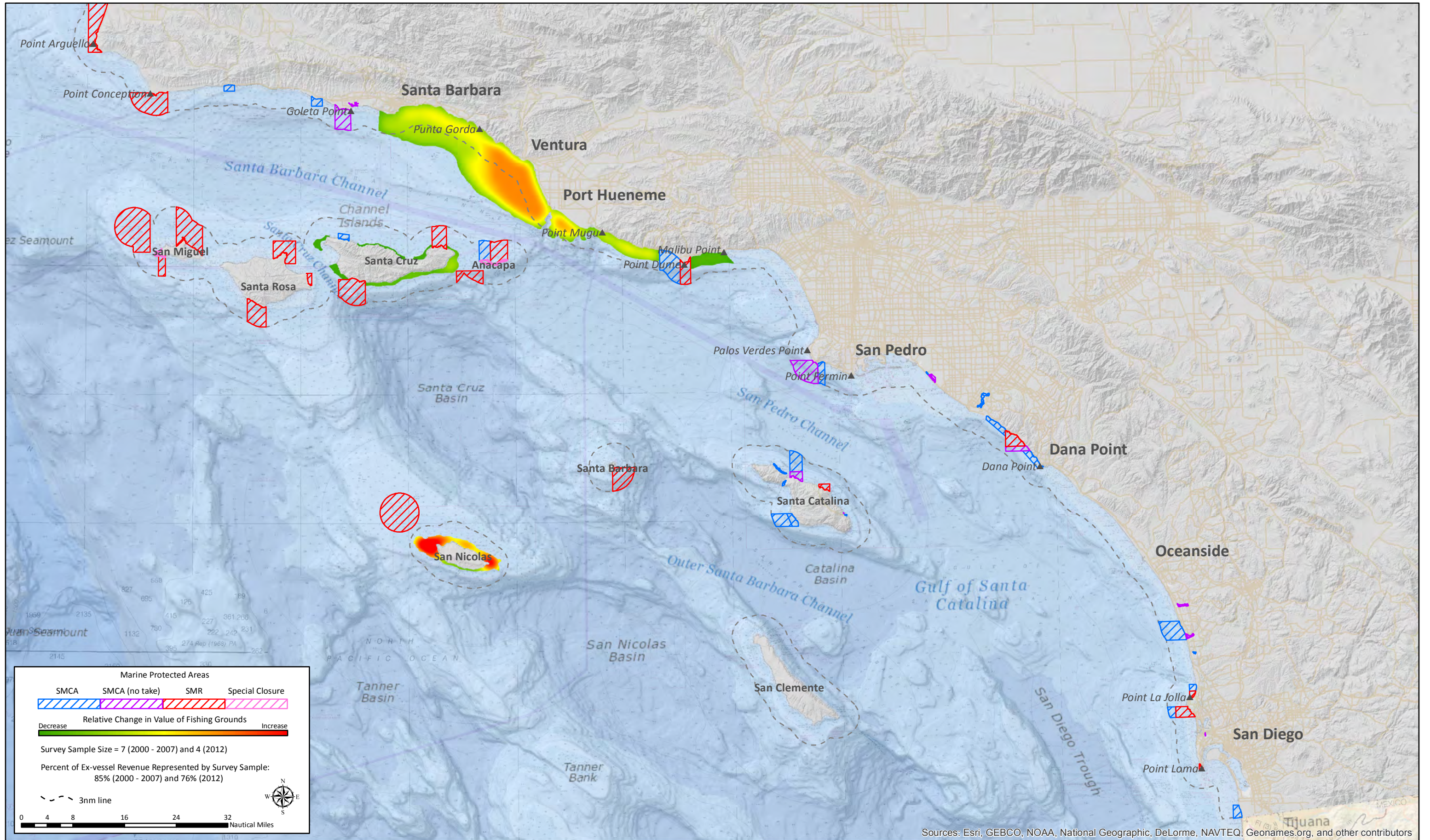
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – Santa Barbara – Sea cucumber–trawl



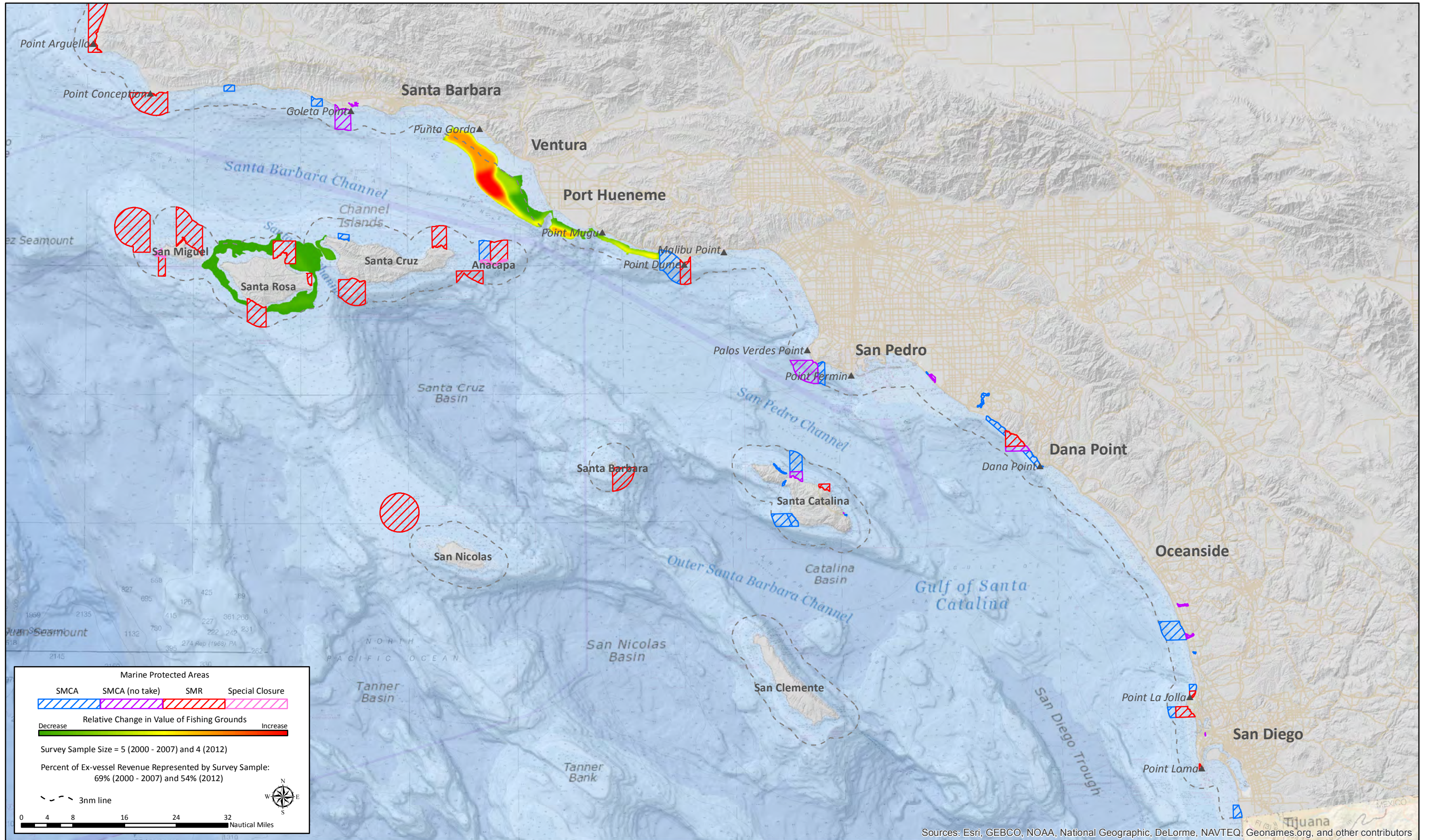
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – Santa Barbara – Urchin–dive



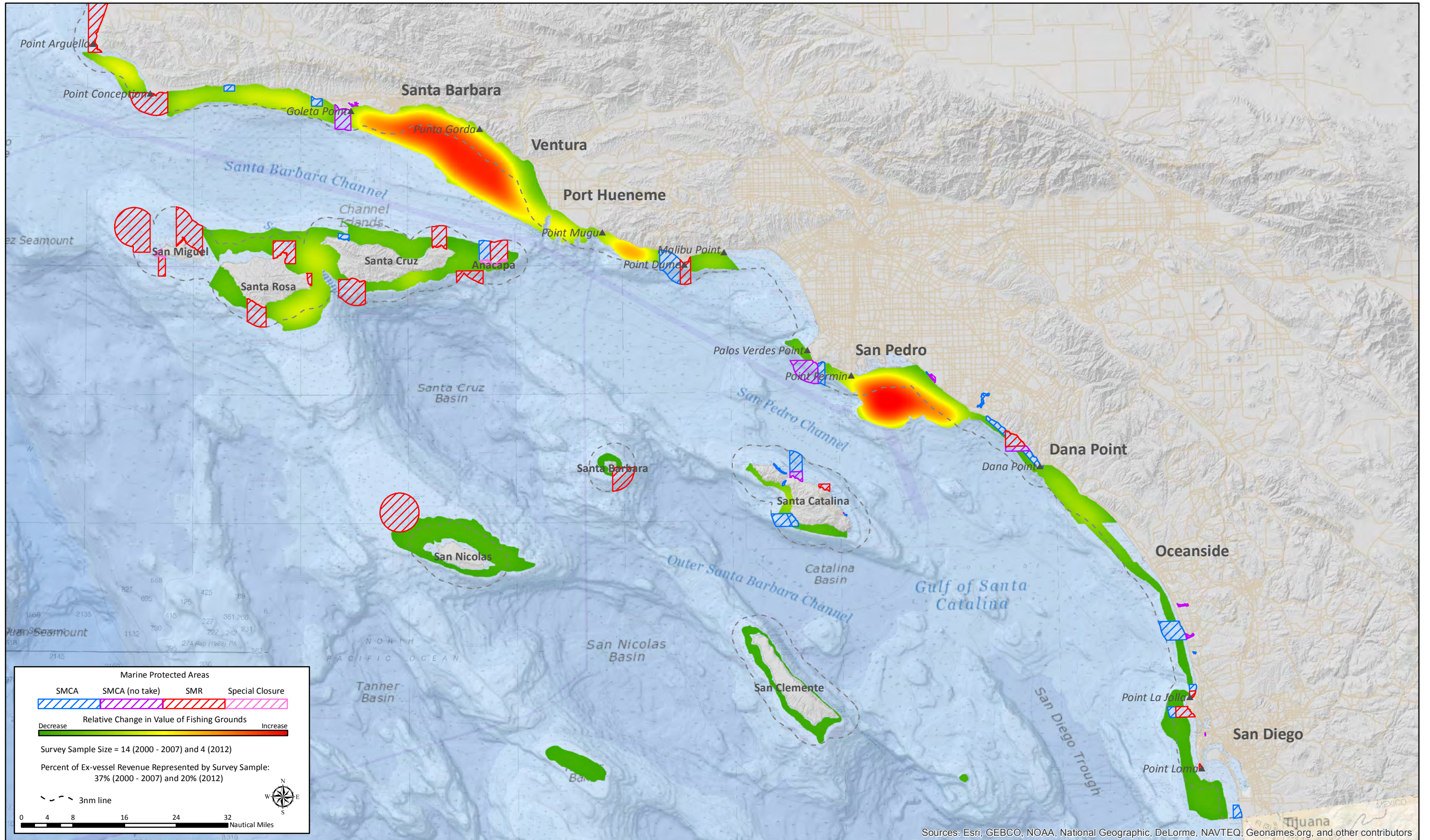
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – Ventura – Lobster-trap



California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – Ventura – Rock crab–trap



California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – Ventura – Market squid–seine



Marine Protected Areas

SMCA	SMCA (no take)	SMR	Special Closure

Relative Change in Value of Fishing Grounds

Decrease Increase

Survey Sample Size = 14 (2000 - 2007) and 4 (2012)

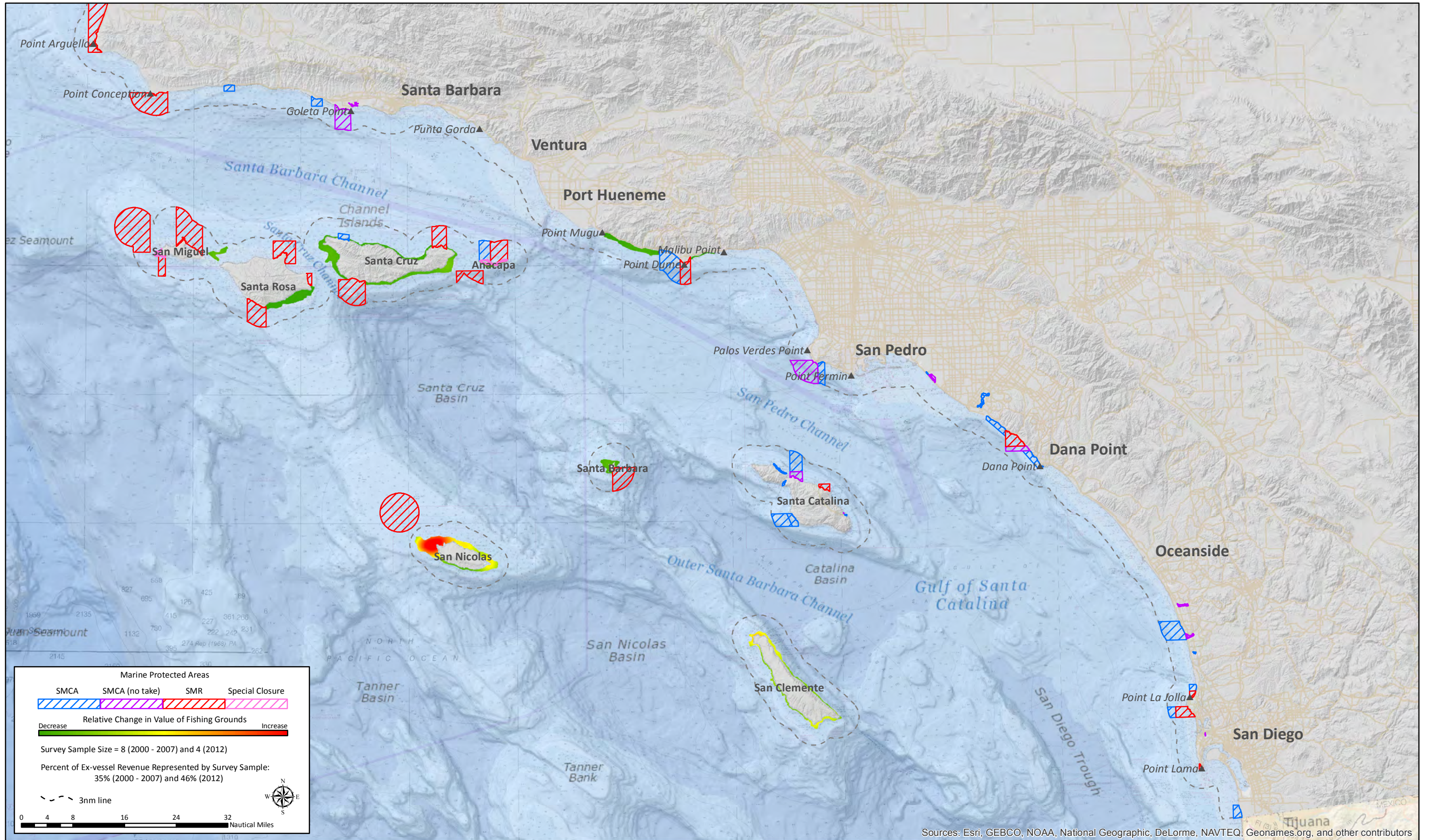
Percent of Ex-vessel Revenue Represented by Survey Sample:
37% (2000 - 2007) and 20% (2012)

3nm line

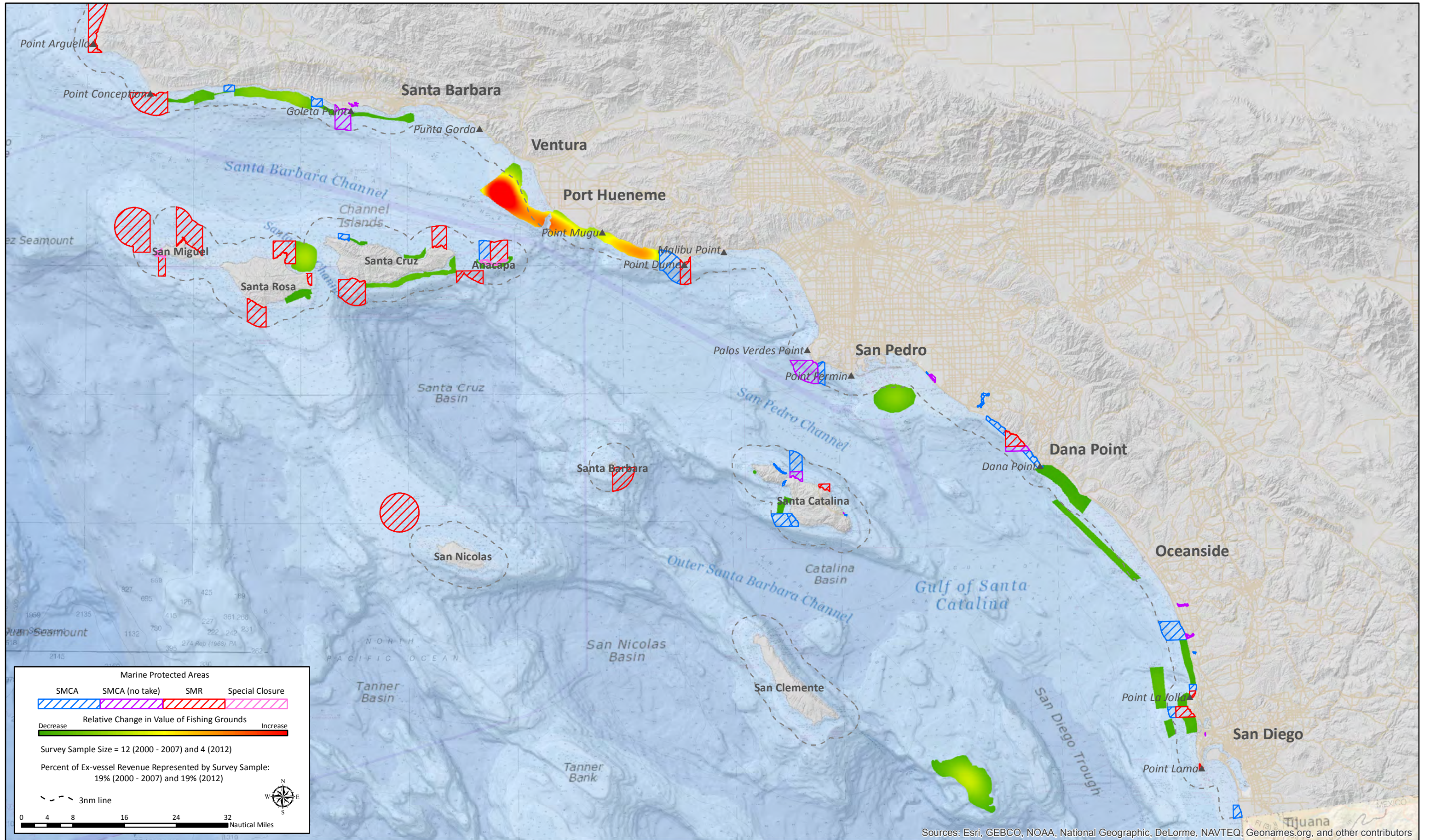
0 4 8 16 24 32 Nautical Miles

Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, NAVTEQ, Geonames.org, and other contributors

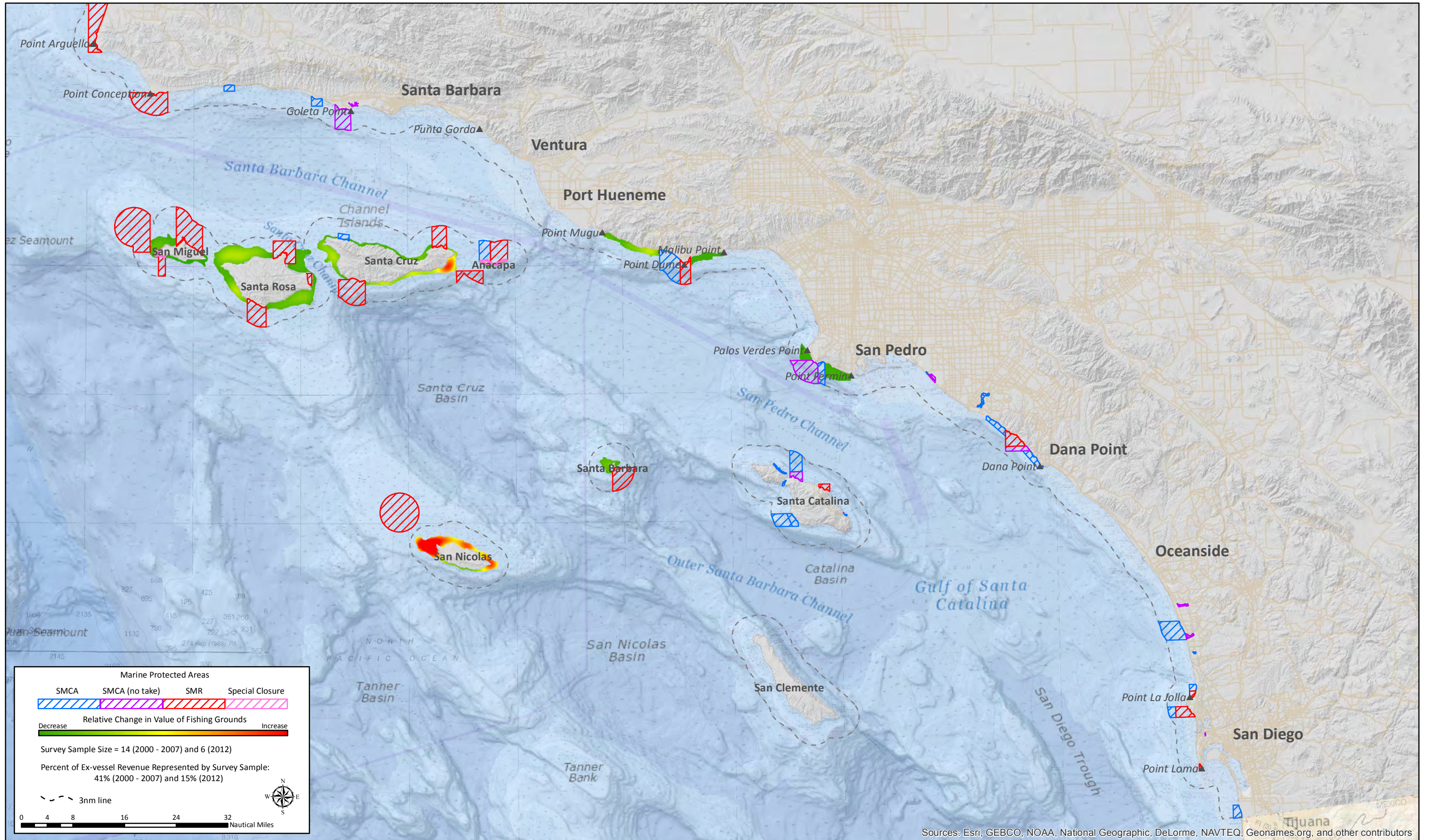
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – Port Hueneme – Sea cucumber–dive



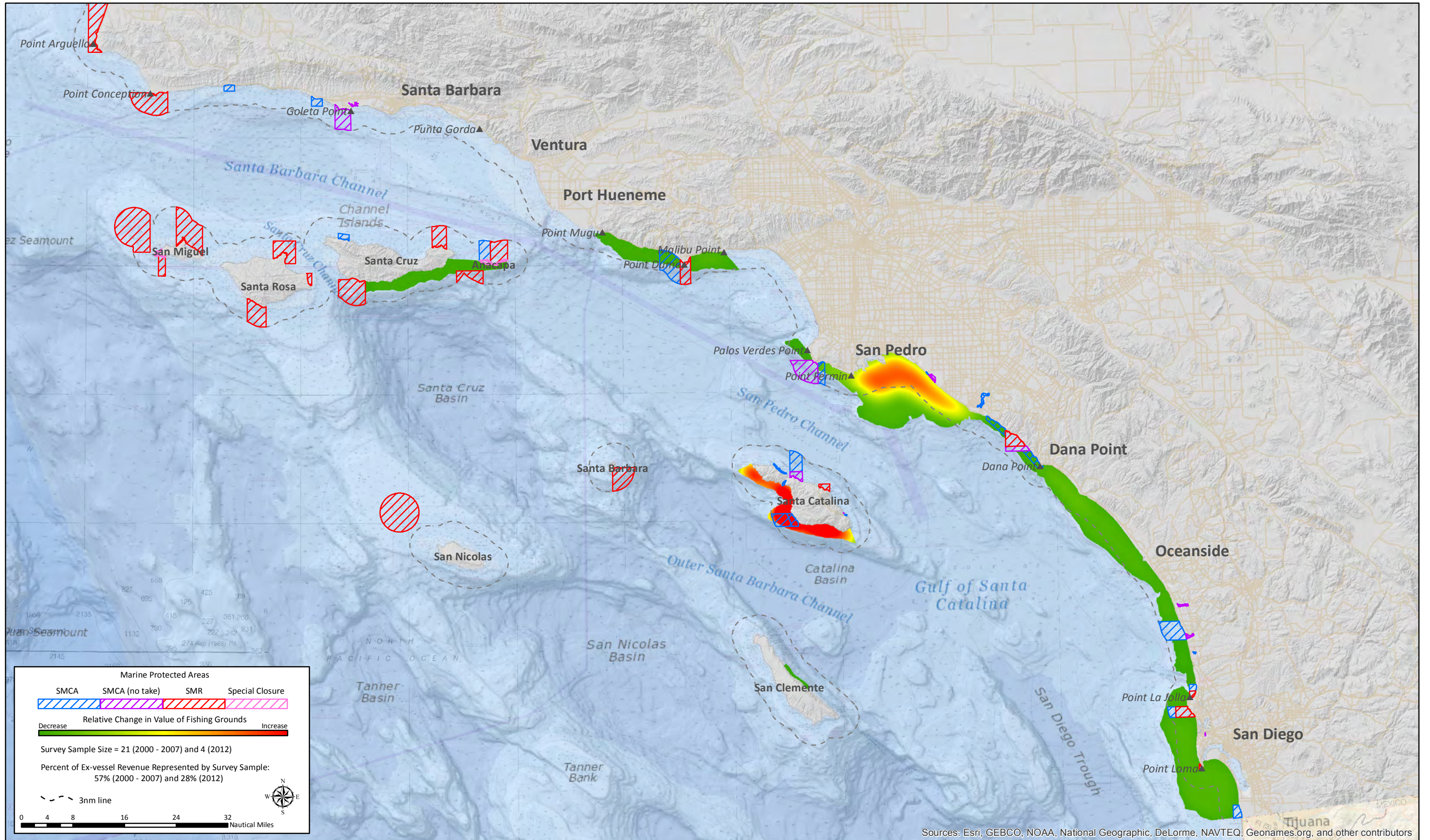
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – Port Hueneme – Market squid–seine



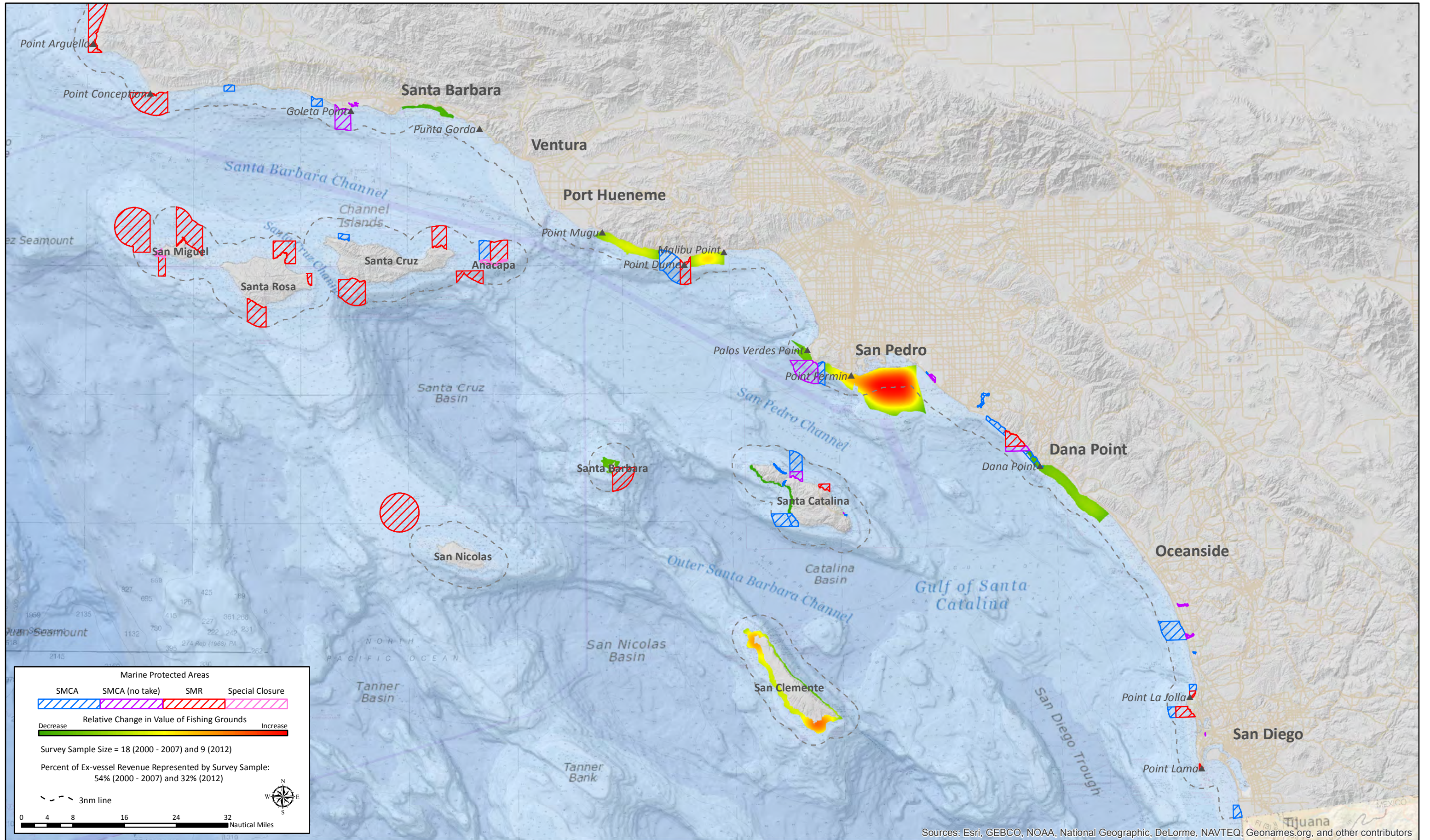
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – Port Hueneme – Urchin–dive



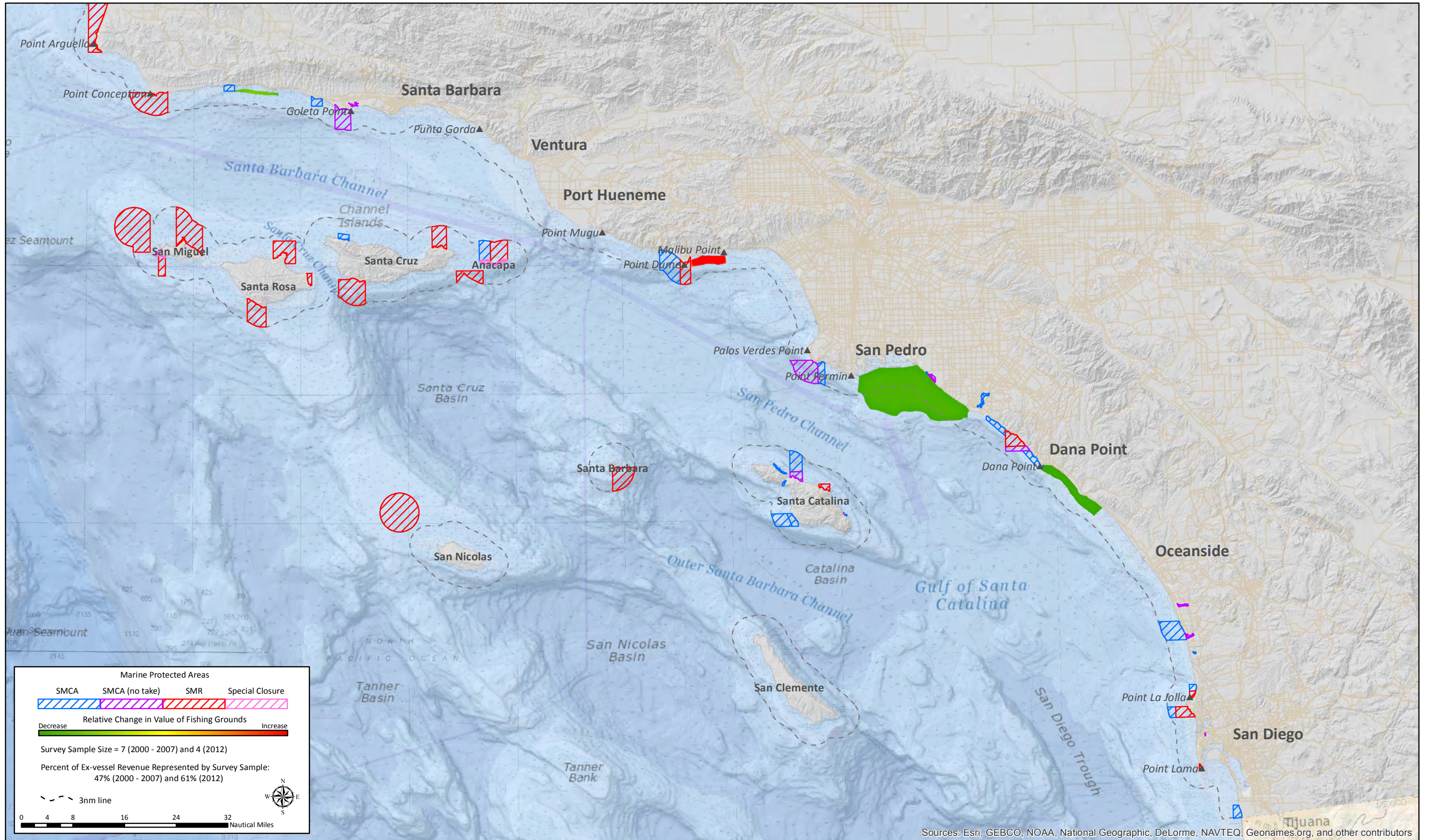
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – San Pedro – Coastal pelagics–seine



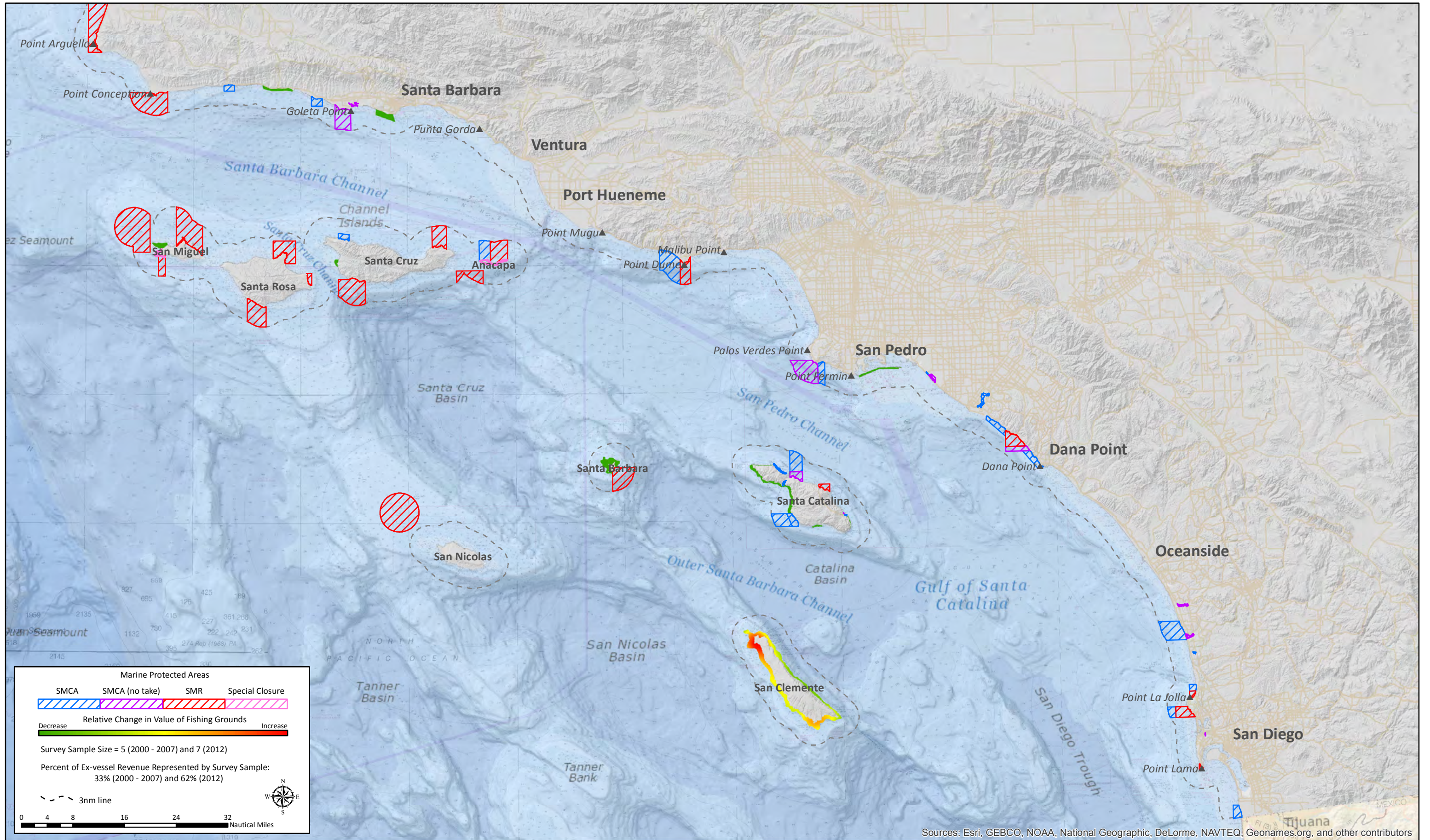
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – San Pedro – Lobster-trap



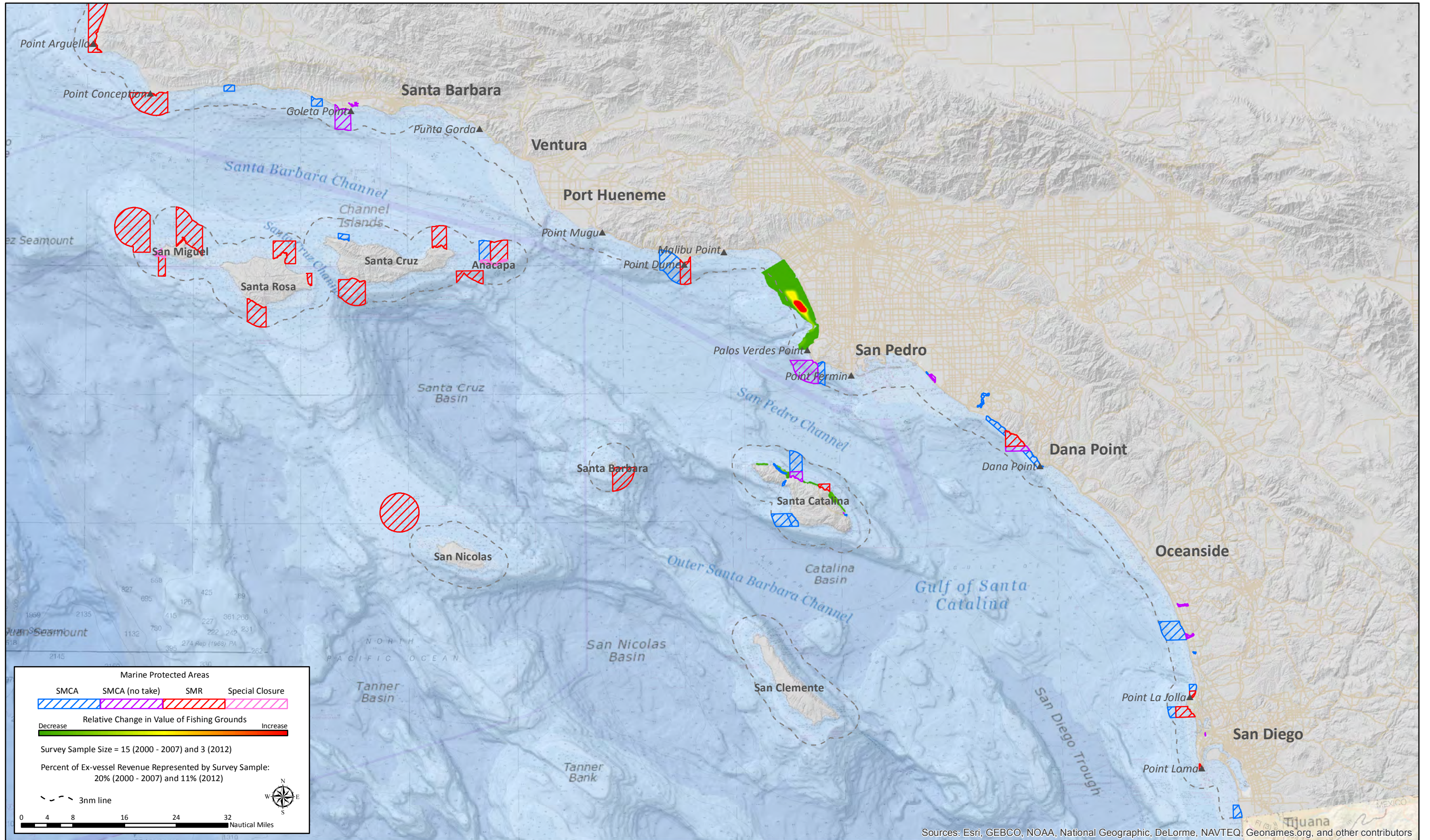
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – San Pedro – Rock crab–trap



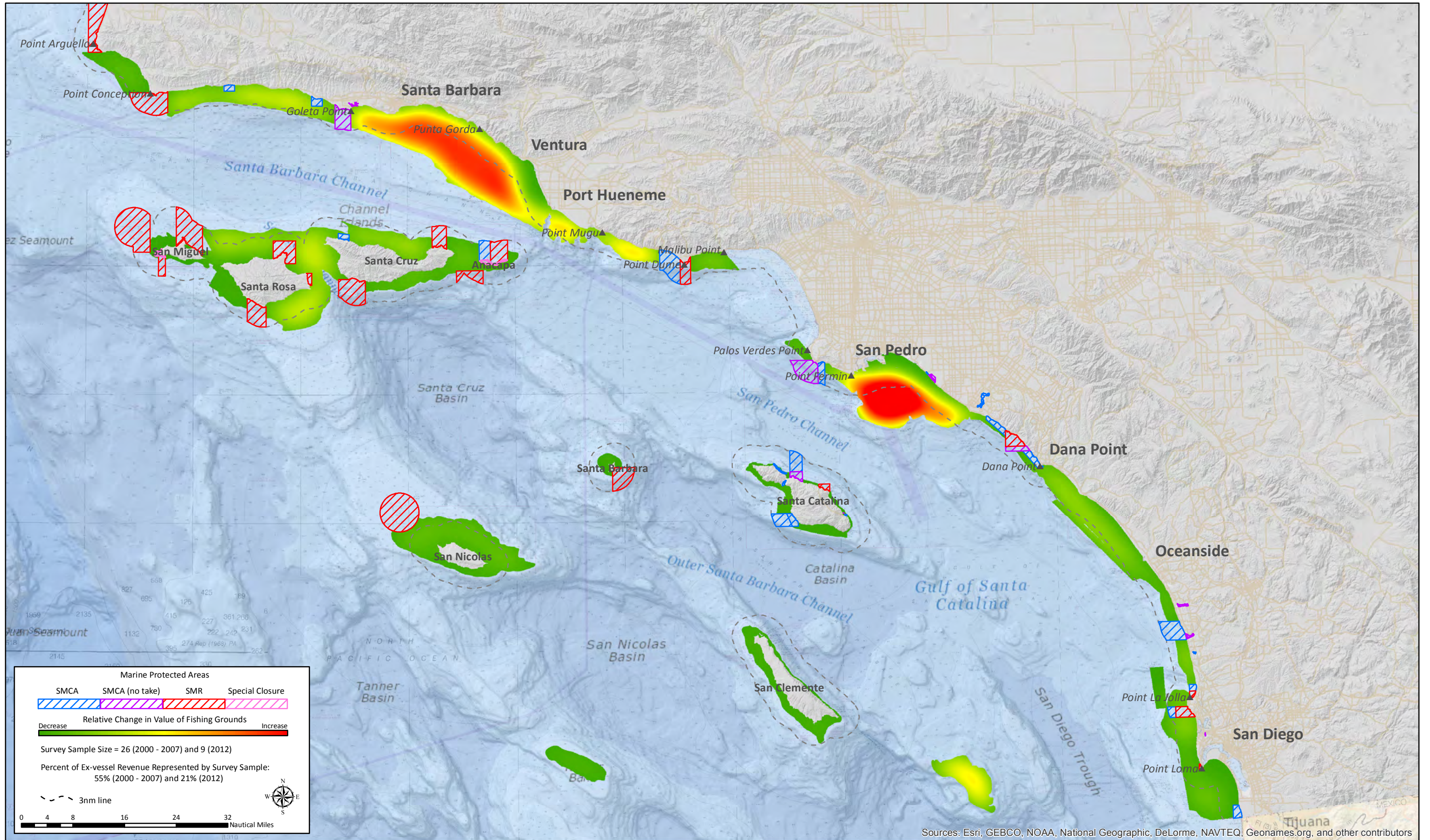
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – San Pedro – Sea cucumber–dive



California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – San Pedro – Market squid–brail



California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – San Pedro – Market squid–seine



Marine Protected Areas

SMCA	SMCA (no take)	SMR	Special Closure

Relative Change in Value of Fishing Grounds

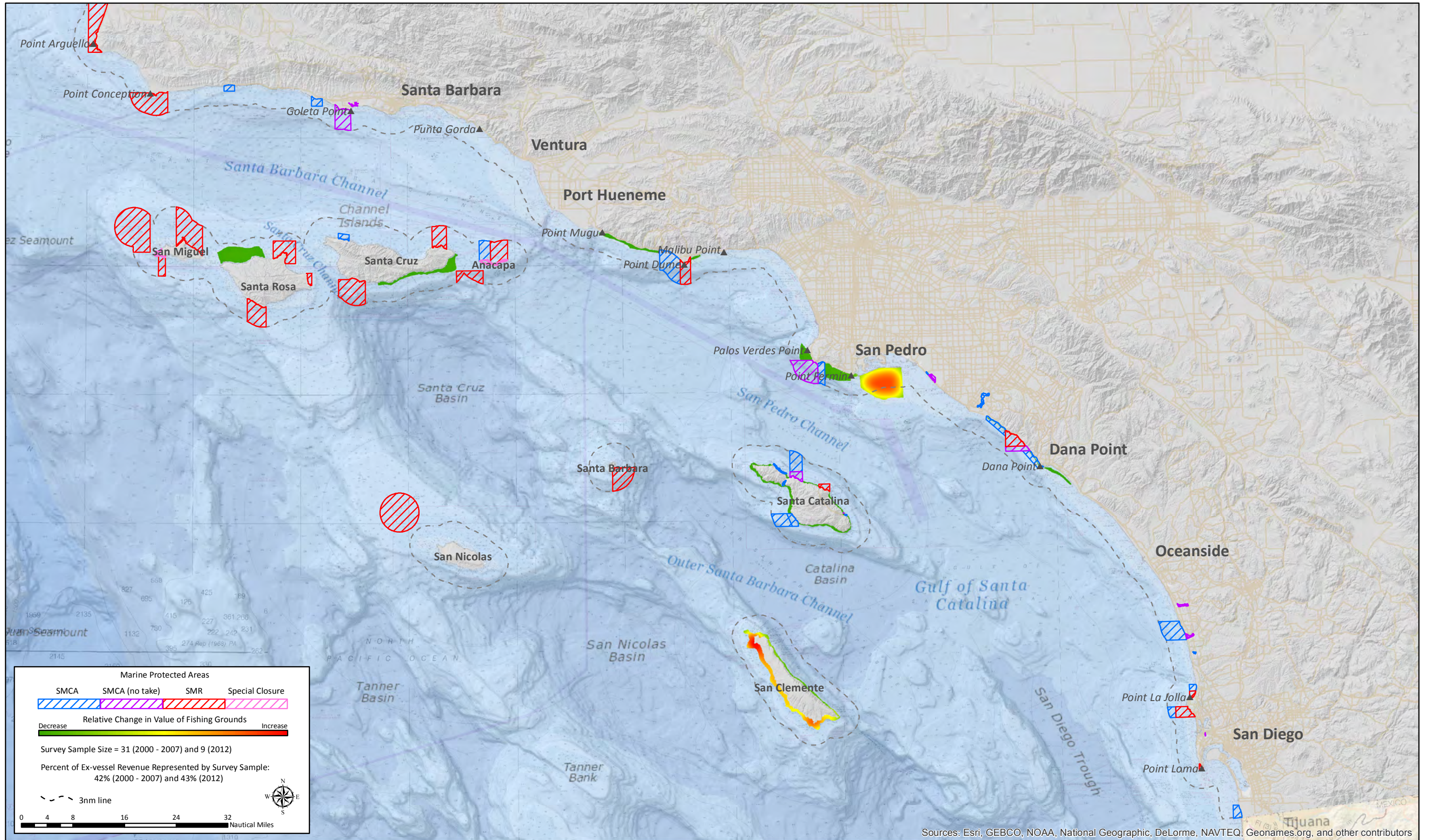
Decrease Increase

Survey Sample Size = 26 (2000 - 2007) and 9 (2012)
 Percent of Ex-vessel Revenue Represented by Survey Sample:
 55% (2000 - 2007) and 21% (2012)

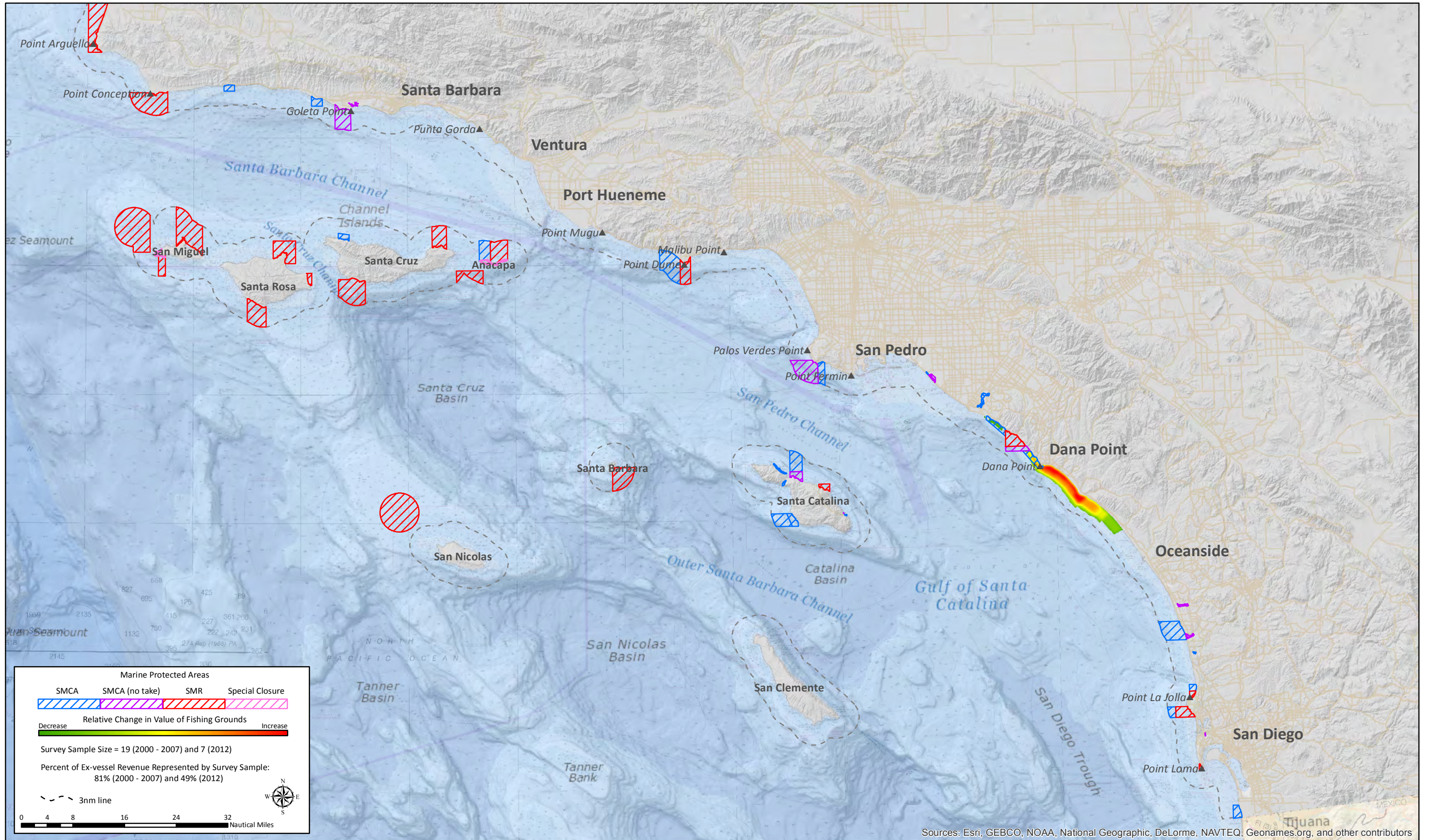
3nm line

Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, NAVTEQ, Geonames.org, and other contributors

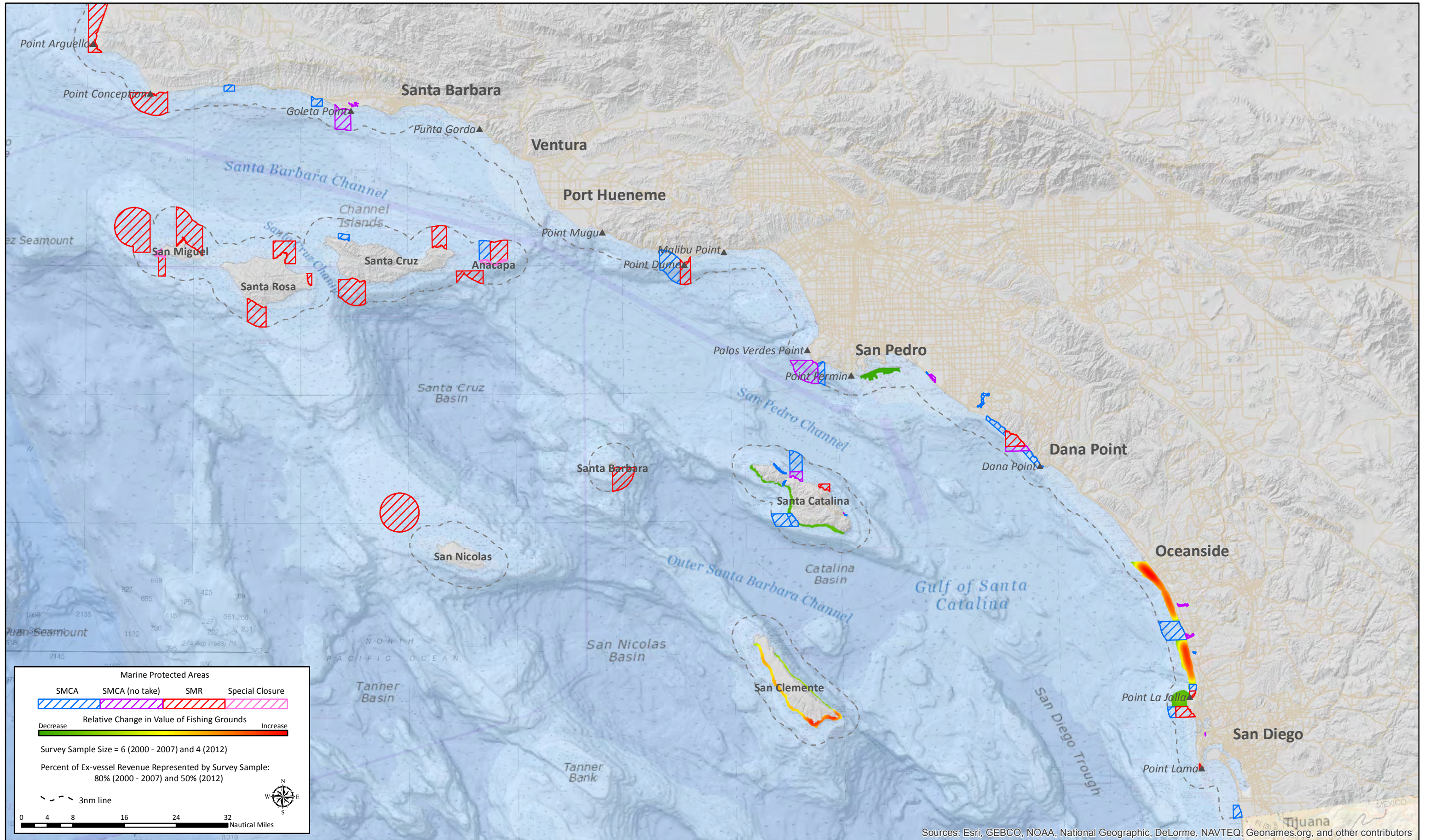
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – San Pedro – Urchin–dive



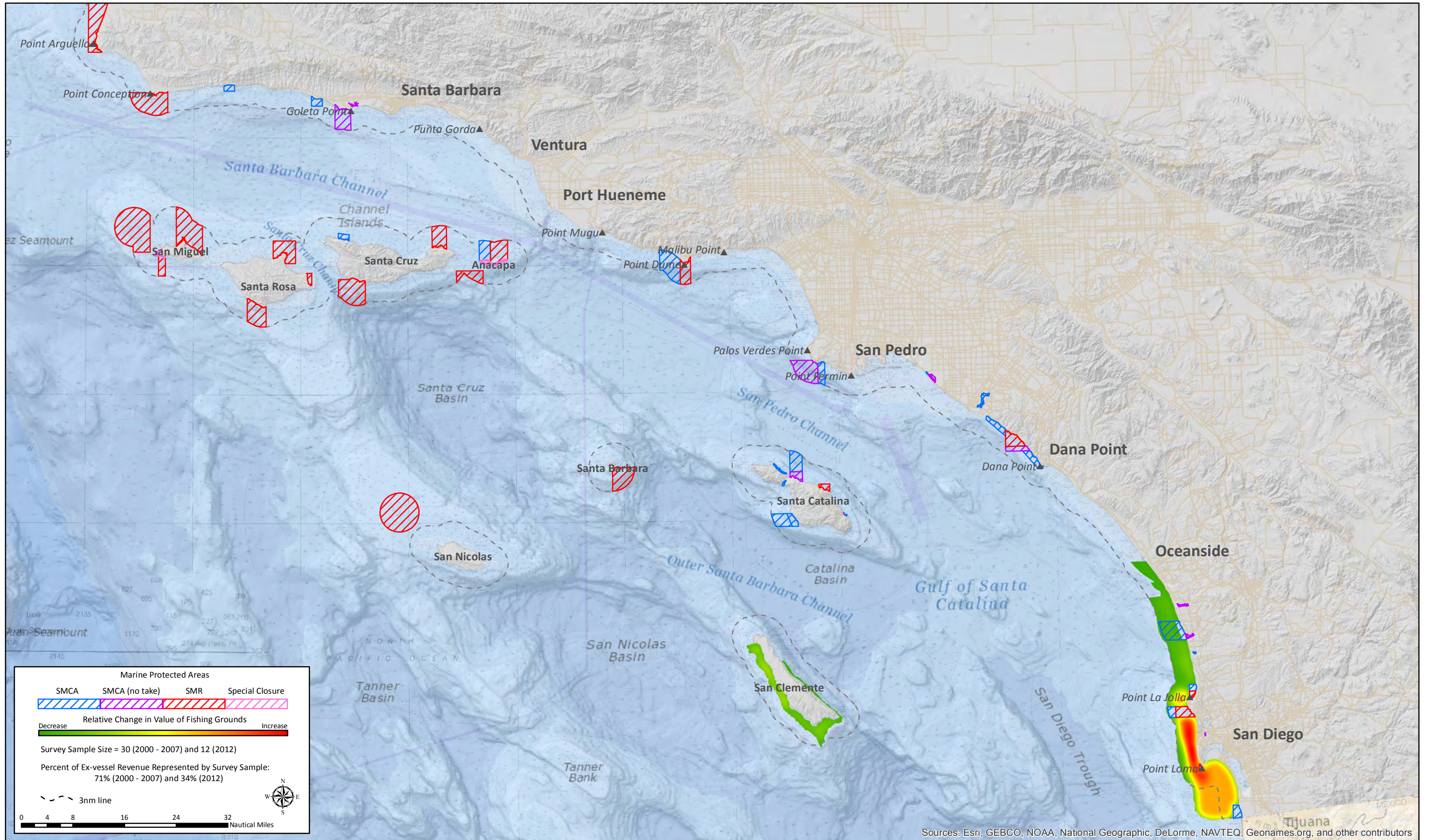
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – Dana Point – Lobster-trap



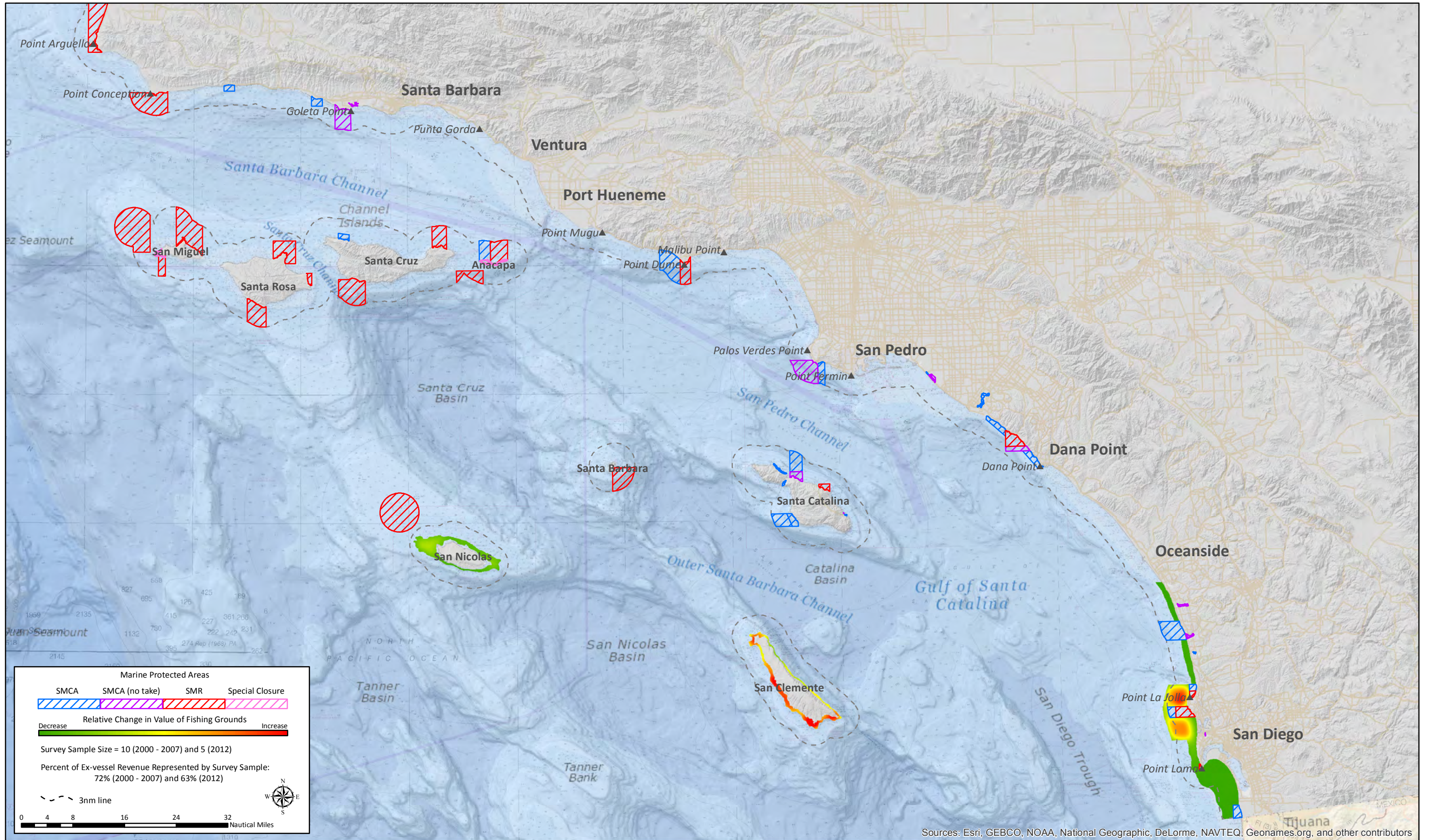
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – Oceanside – Lobster-trap



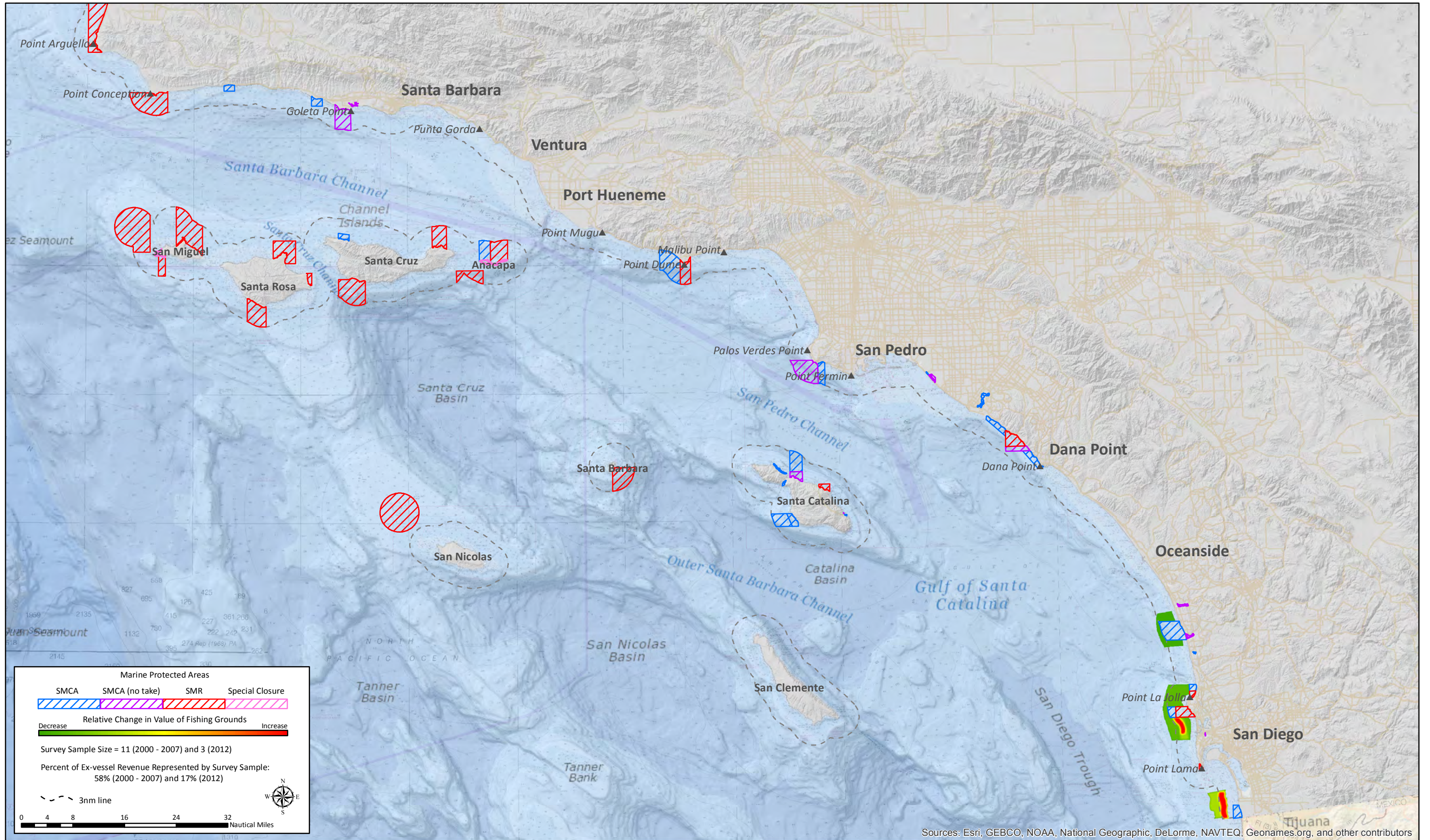
California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – San Diego – Lobster-trap



California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – San Diego – Nearshore finfish–live–fixed gear



California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – San Diego – Rock crab–trap



California South Coast: Change in the Relative Value of Commercial Fishing Grounds Pre MPA (2000 - 2007) to Post MPA (2012) – San Diego – Urchin–dive

