

State of the West Coast of the Nation's Marine Managed Areas

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Types of MMAs

marine reserve

monument

essential fish habitat

marine sanctuary

wildlife management area

preserve

national park

recreation area

critical habitat

conservation area

natural area

wildlife refuge

seashore

areas of special biological significance

closed area

research natural area

research reserve

Questions

- How is place-based management used to conserve vital west coast marine resources?
- What and where are all the different types of areas that manage marine resources along the West Coast of the U.S?
- What agencies and programs administer these sites?
- To what extent do MMAs restrict or limit human activities?
- Are there No-Take MPAs?

Outline

- **MMA Inventory**
- **National MMA Perspective**
- **West Coast MMAs**
- **State MMAs**
 - California
 - Oregon
 - Washington
- **Conclusions**

MMA Terminology

Marine Managed Area- area of marine environment with marine resource conservation purposes

- **area:** have legally defined boundaries
- **marine:** be an area of ocean or coastal waters or the Great Lakes
- **reserved:** be established by or currently subject to site-specific regulation
- **lasting:** provide year-to-year protection for a minimum of two consecutive years
- **protection:** have existing regulations that afford increased protection specifically to natural and/or cultural resources and qualities within the site

MMA > MPA

National MMA Inventory

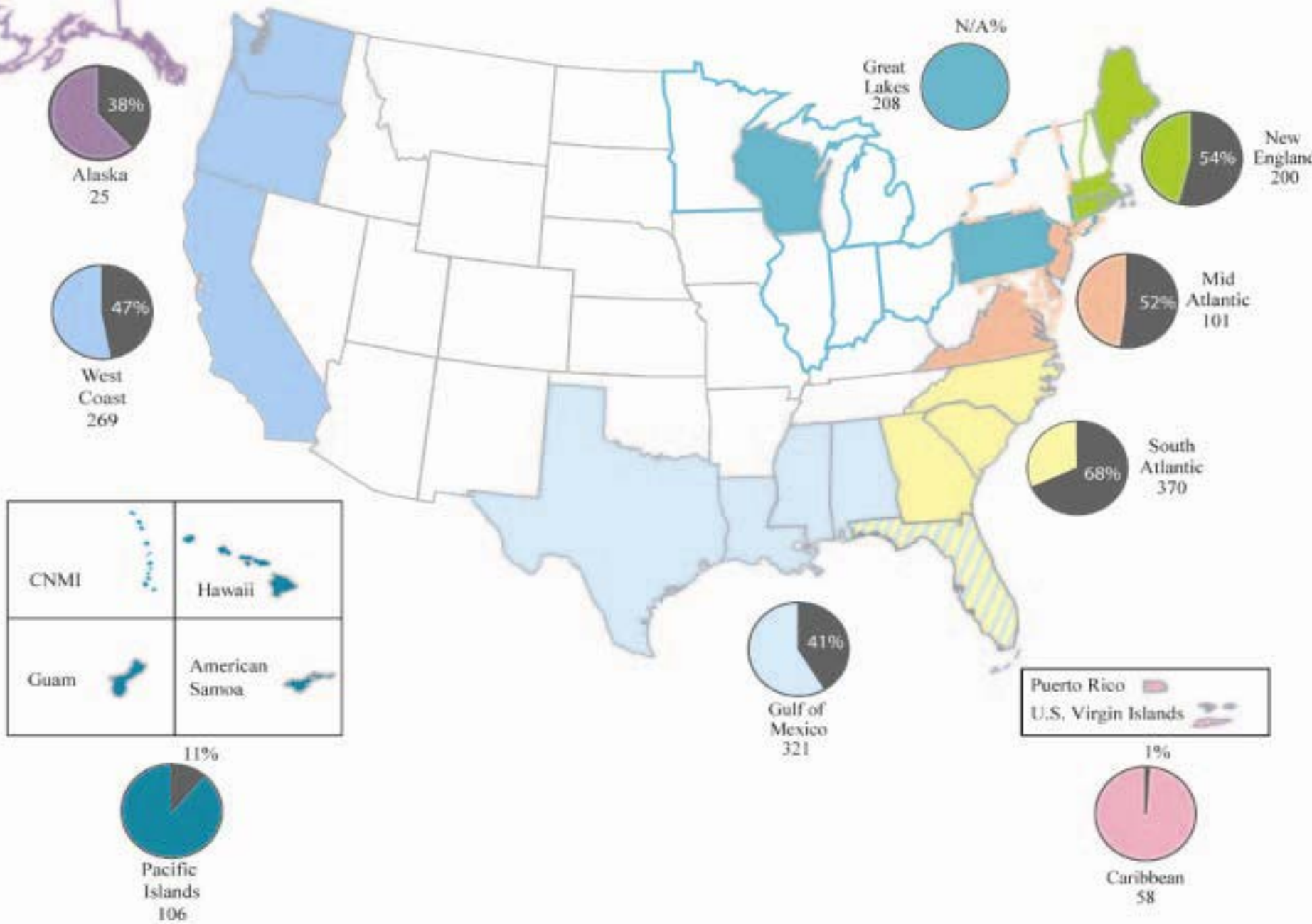
Document location, purpose & management approach of existing MMAs to:

- *Understand potential ecological and socio-economic effects.*
- *Identify future place-based conservation gaps and priorities.*
- *Inform the development of the National System of MPAs.*

To Date:

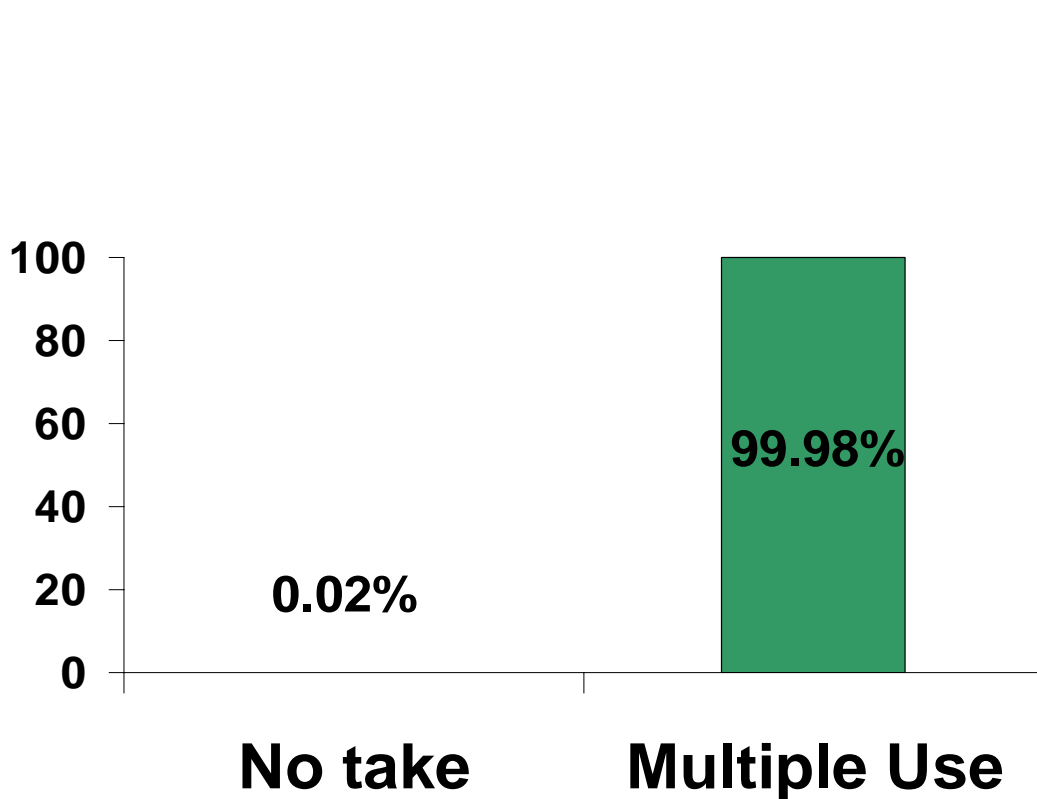
- **Standard data on all MMA sites, including programmatic and functional information, and GIS boundaries.**
- **Contains over 1,500 MMA sites throughout the U.S., from New England to the Gulf of Mexico to the Pacific Islands.**
Dynamic process.
- **Data collected from most federal, state, and territorial agencies and programs; posted on www.mpa.gov.**

Number and Percent Area of EEZ in MMAs in the U.S.



National picture

Multiple Use versus No Take



- Close to 100% of area in U.S. MMAs is multiple use, allowing fishing and/or other extractive activities.
- Less than 0.02% of area in MMAs in U.S. are no take.

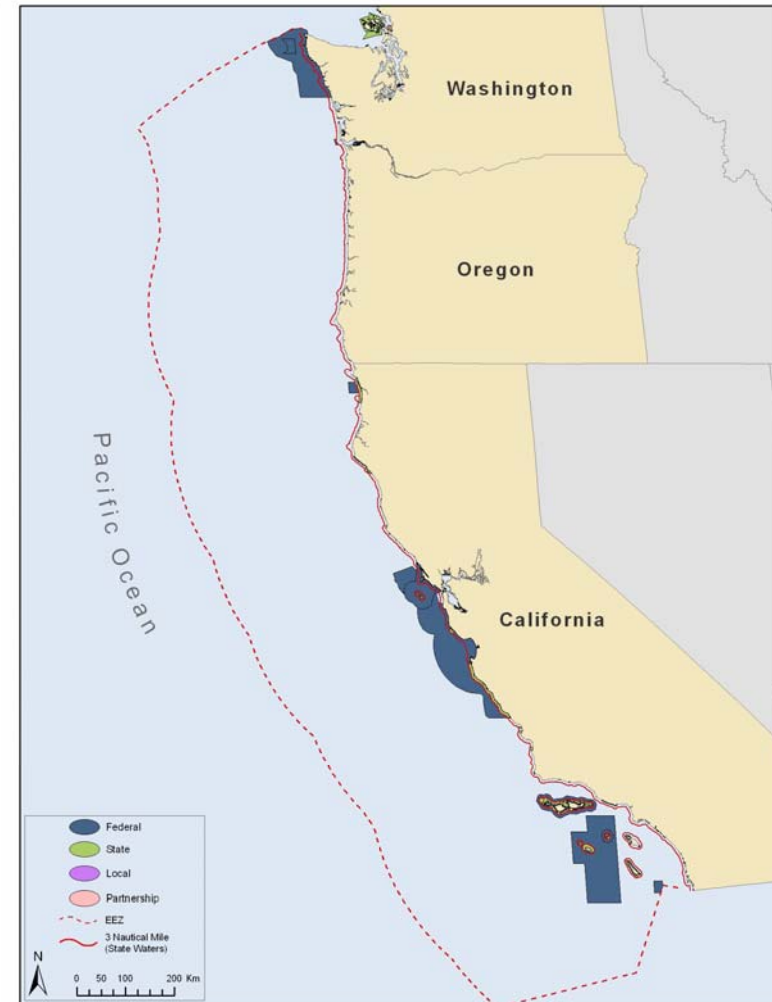
National MMAs at a glance

- **> 1500 individual MMAs in US waters**
- **Majority are multiple use**
- **Few are no take**
- **No take MMAs are typically very small**
- **Most common MMAs in U.S. are state-managed, multiple-use sites that allow a variety of extractive uses, including fishing.**
- **The rarest MMAs are federal, no-take reserves established to protect Natural Heritage values.**
- **Commercial fishing is generally more restricted and managed than recreational fishing.**

West Coast

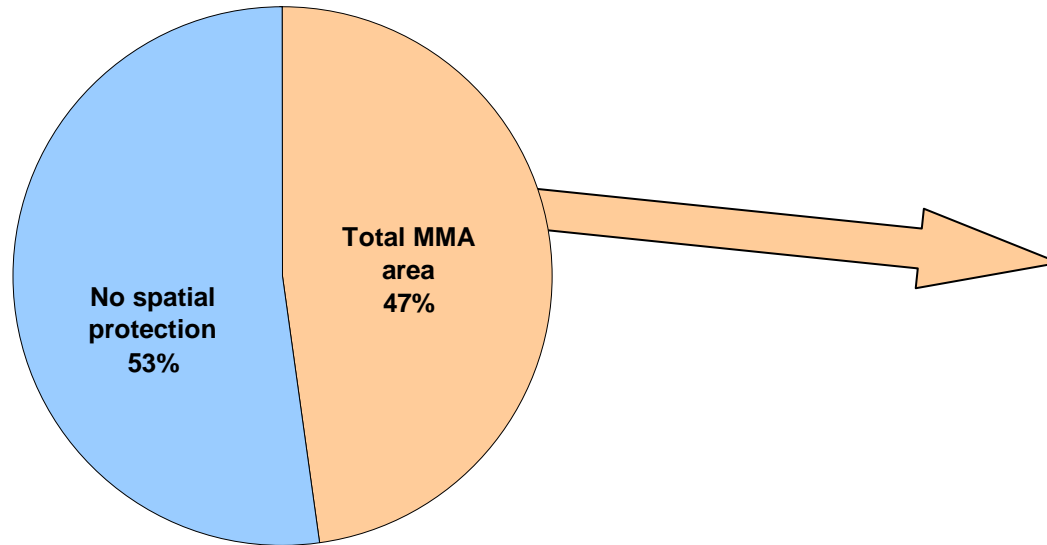
State of the West Coast MMAs

- **269 MMAs off West Coast**
 - CA, WA, OR
- **Combination of federal, state, partnership and local sites**
- **Many MMAs span state and federal waters**
- **Recent addition of EFH Sites radically changes the marine landscape of spatial protection**

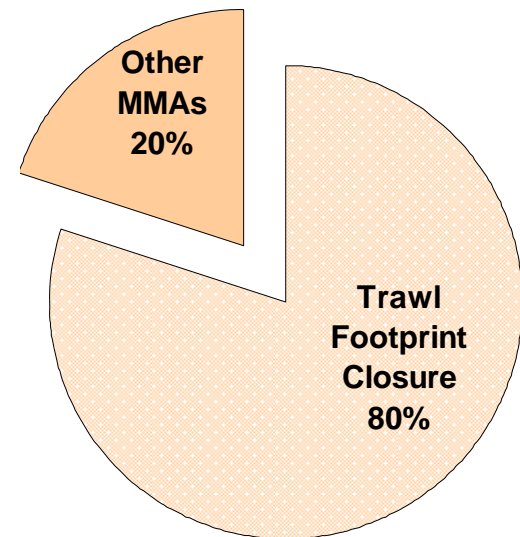


West Coast Waters Covered by MMAs

Total MMA area



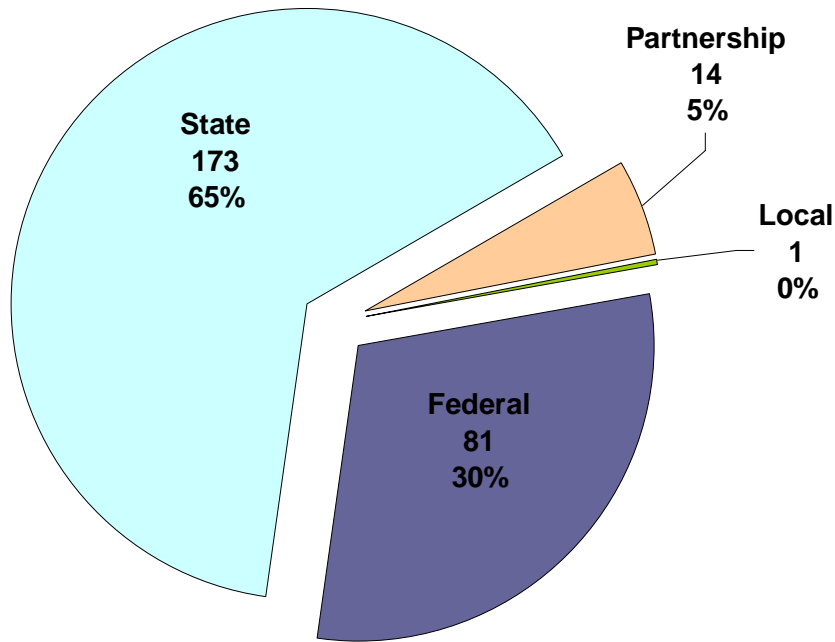
Contribution of EFH to MMAs



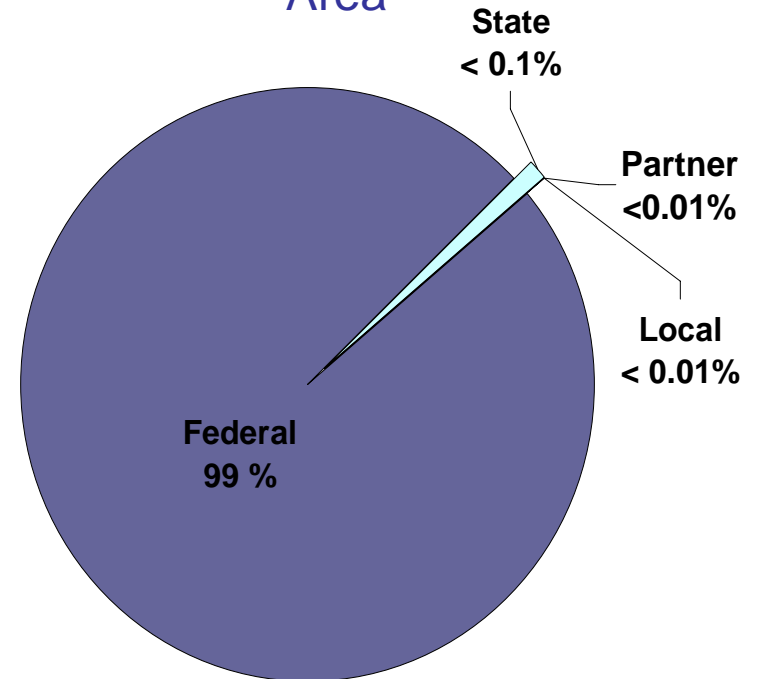
- 47% of west coast waters are covered by some sort of MMAs
- Recent (2006) designation of federal EFH areas dramatically increased MMA coverage from 6 % - 47 % of West Coast waters
- Dominated by a single EFH site; 52 individual sites

West Coast Level of government

Number



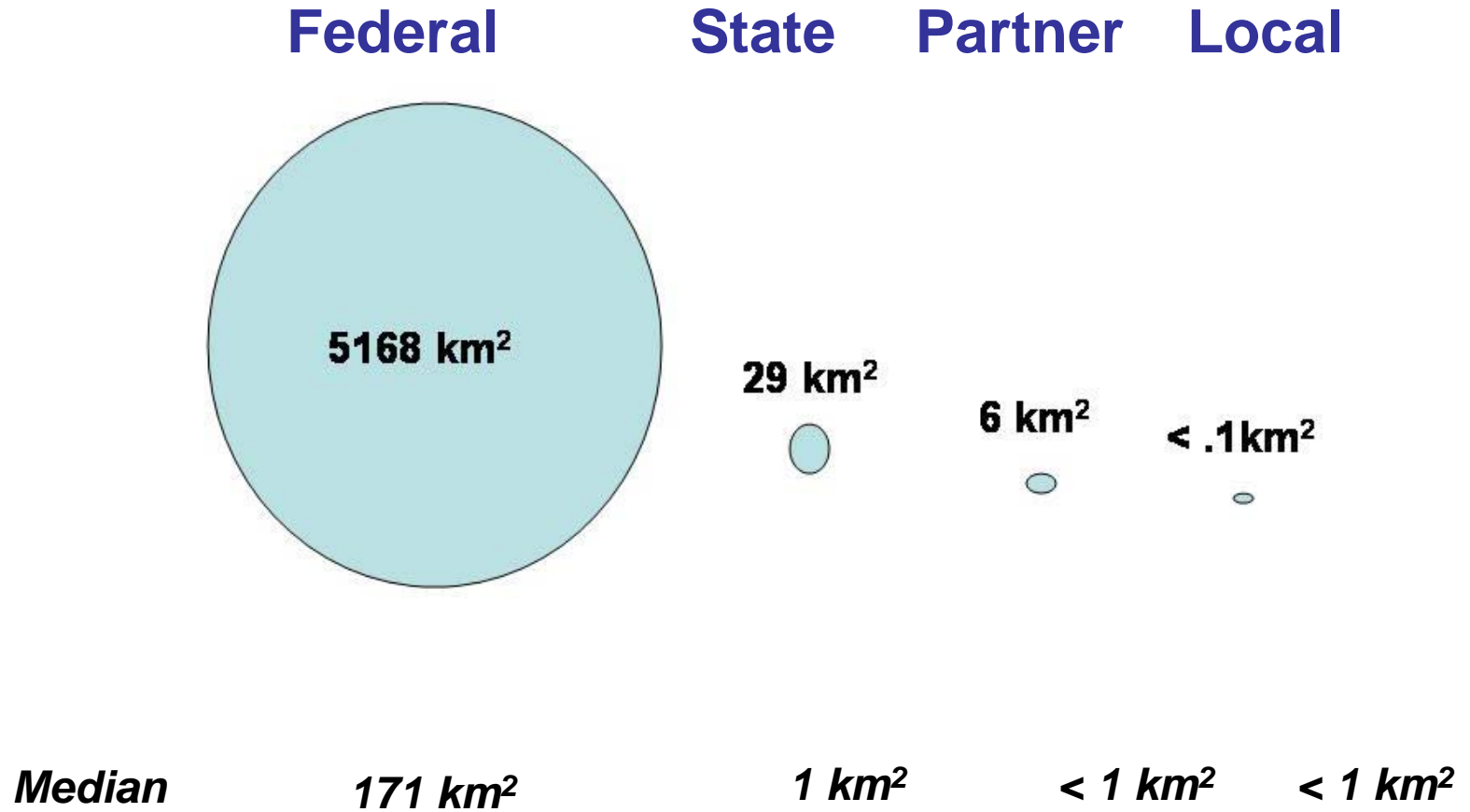
Area



- Twice as many state MMAs as federal MMAs
- Federal MMAs cover vastly more area than state or other MMAs

West Coast MMAs

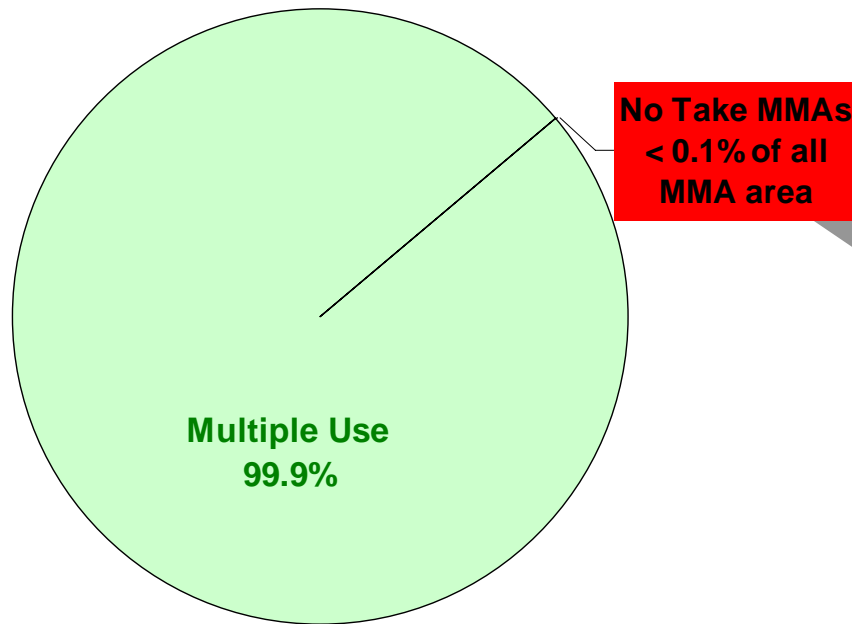
Differences in MMA Size



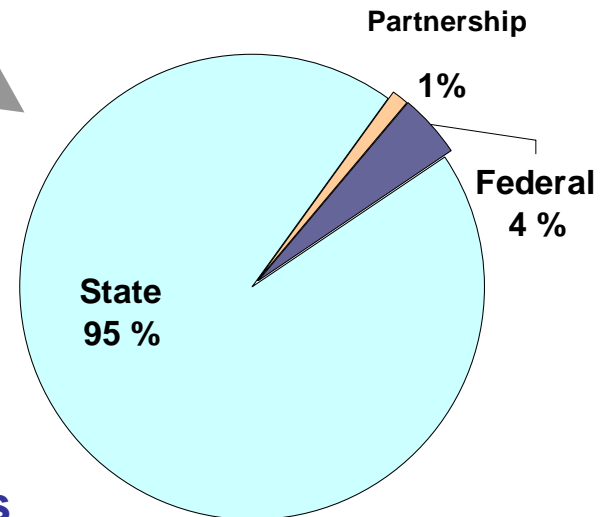
West Coast MMAs

Level of Protection (by area)

Multiple use vs. No-Take



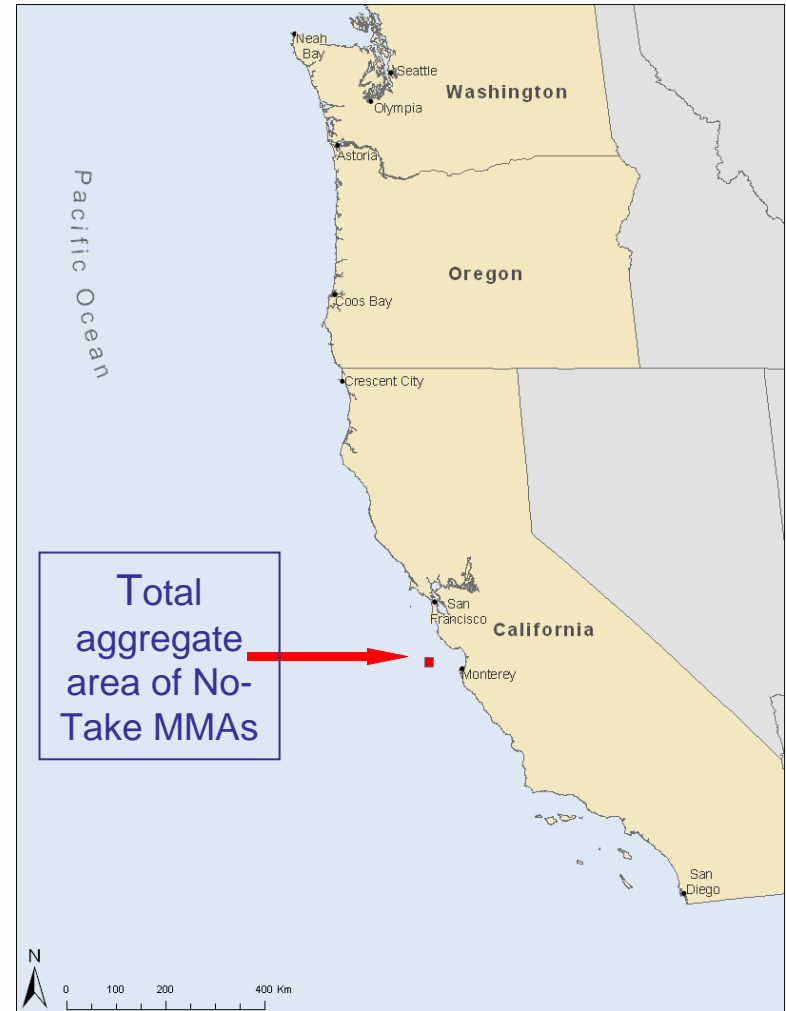
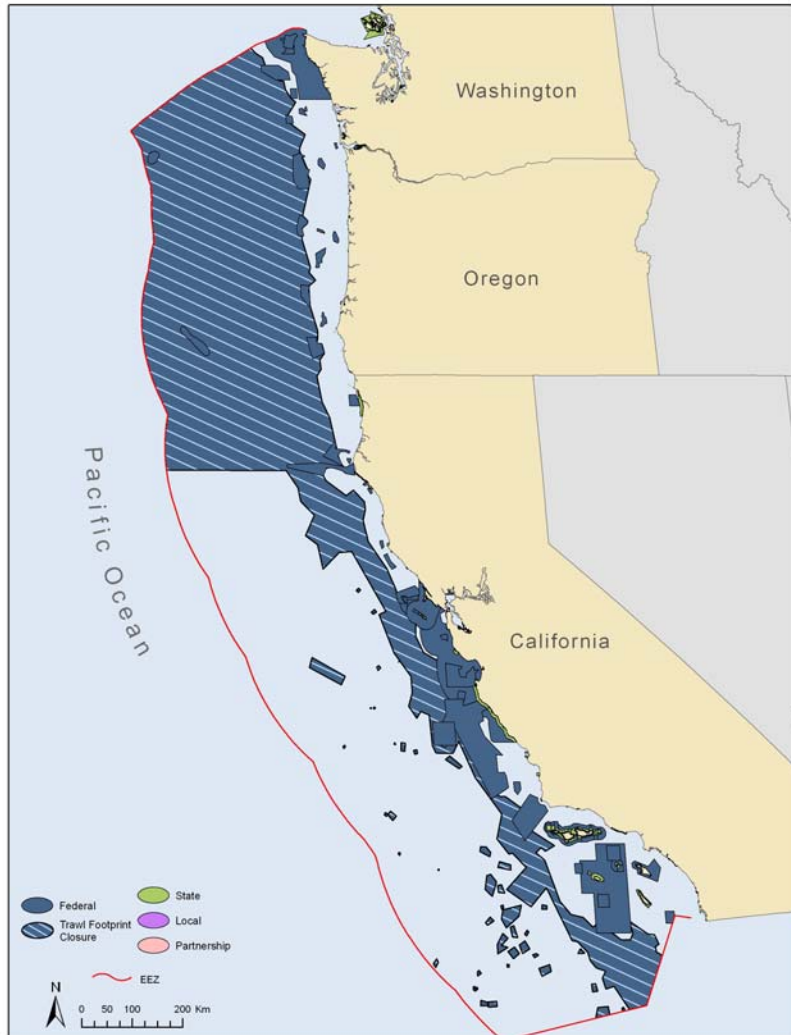
Who Manages No-Take MMAs?



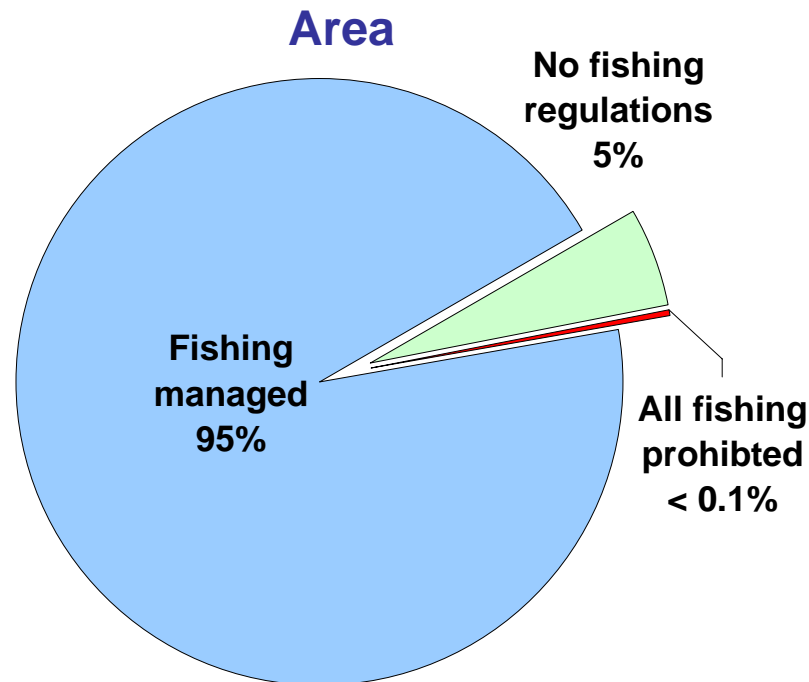
- Less than 0.1% of MMA area in No-Take MMAs
- Tiny fraction of West Coast waters in No-Take

West Coast MMAs

No-Take MMA Area



West Coast MMAs Fishing Regulations



* Refers to fishing regulations implemented by the MMA. Background fishing regulations implemented by state and federal agencies still apply

- **Fishing is managed in most MMAs**
- **Fishing is prohibited in a tiny fraction of the MMA area**
- **MMAs regulate commercial fishing more than recreational fishing**

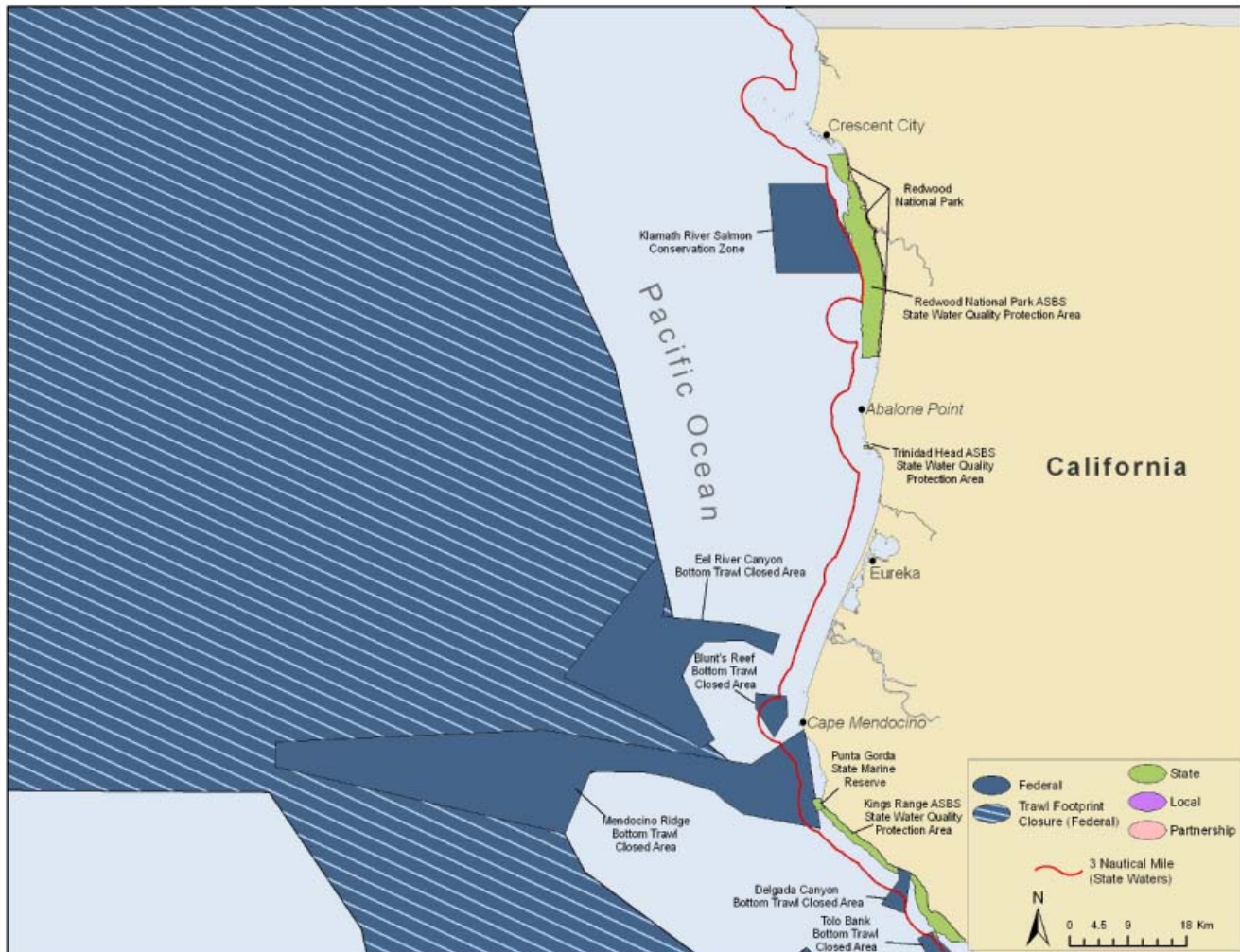
West Coast MMAs Summary

- **Almost half of the West Coast waters in MMAs;
BUT.....**
- **Overwhelmingly majority (99.9 %) are multiple use; < 0.01 no –take**
- **Federal MMAs are typically large and multiple use**
- **State MMAs are typically small**
- **No-take MMAs are primarily state sites and small**
- **Largest MMAs are Federal with dual conservation focus-
–Sustainable Production and Natural Heritage**
- **Patterns confirm some, and refute other, widely held perceptions
about how MMAs are used regionally**

State Waters (0 - 3 nm)
California, Oregon, & Washington

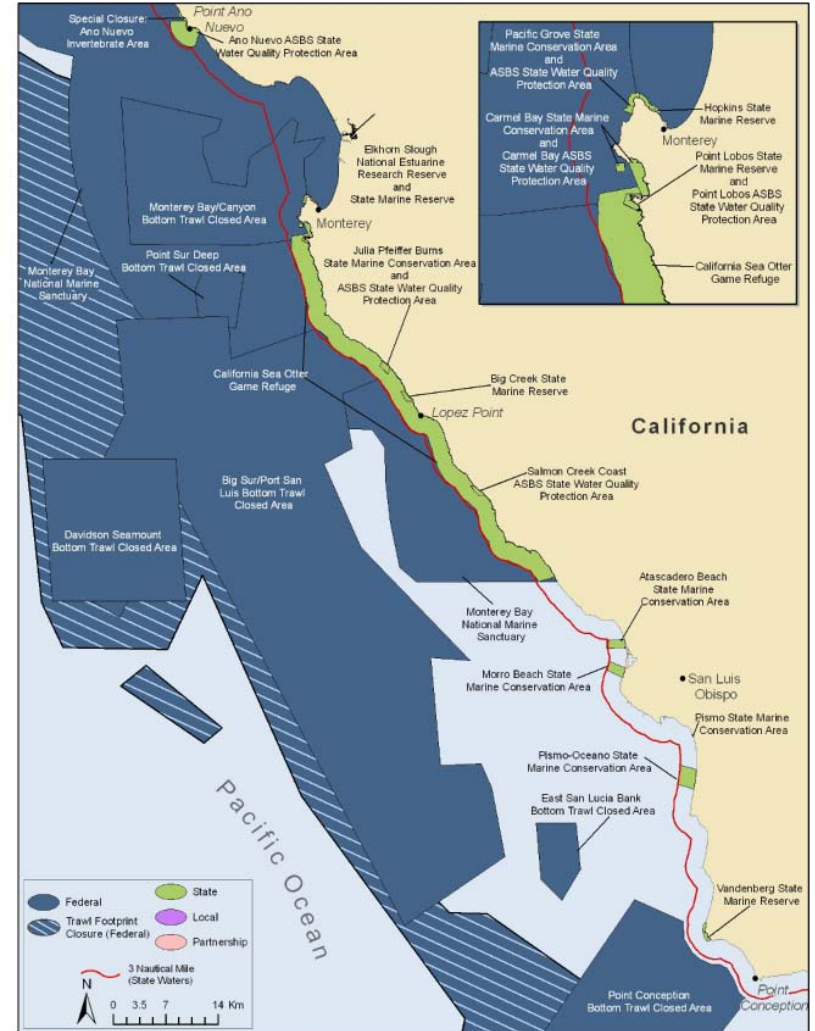
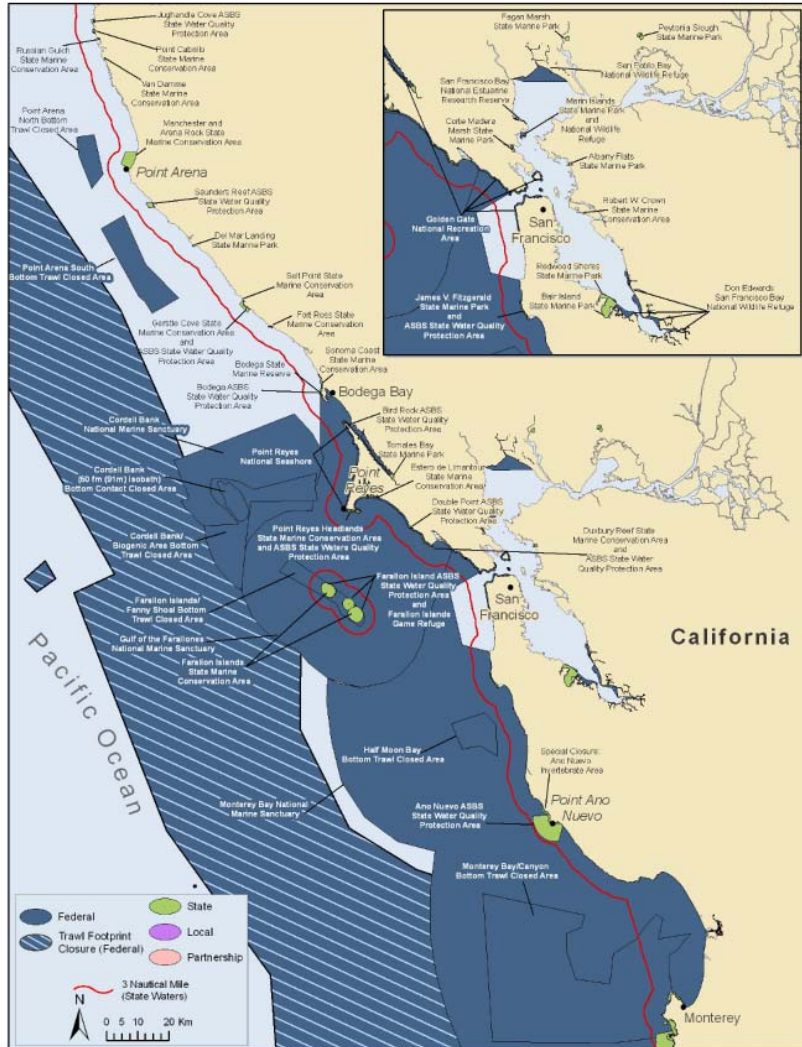
California MMAs

Distribution by level of government



California MMAs

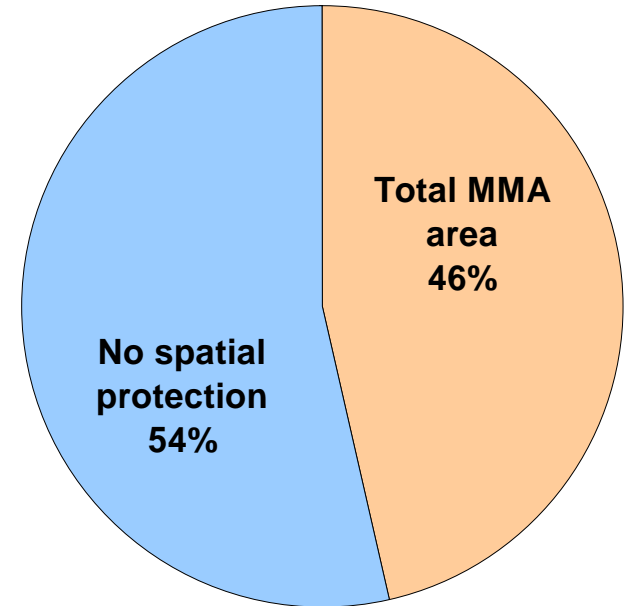
Distribution by level of government



California MMAs

State Waters (0-3 nm)

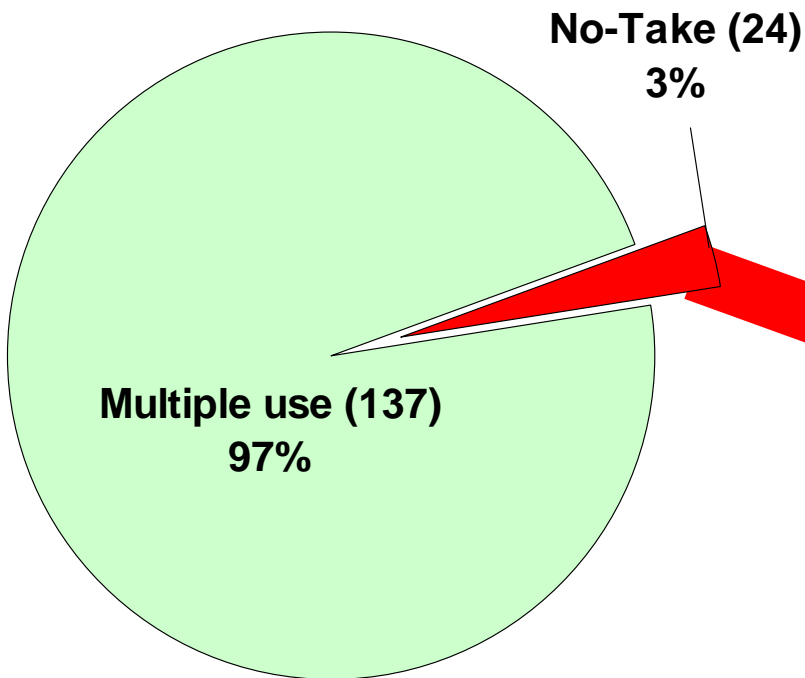
- 161 MMAs
- Cover nearly half of California waters
- MMAs span coastline, near-shore and offshore
- Large portion clustered in central and southern CA
- Federal MMAs cover more area
- State MMAs are more numerous
- Largest MMA is Monterey Bay National Marine Sanctuary



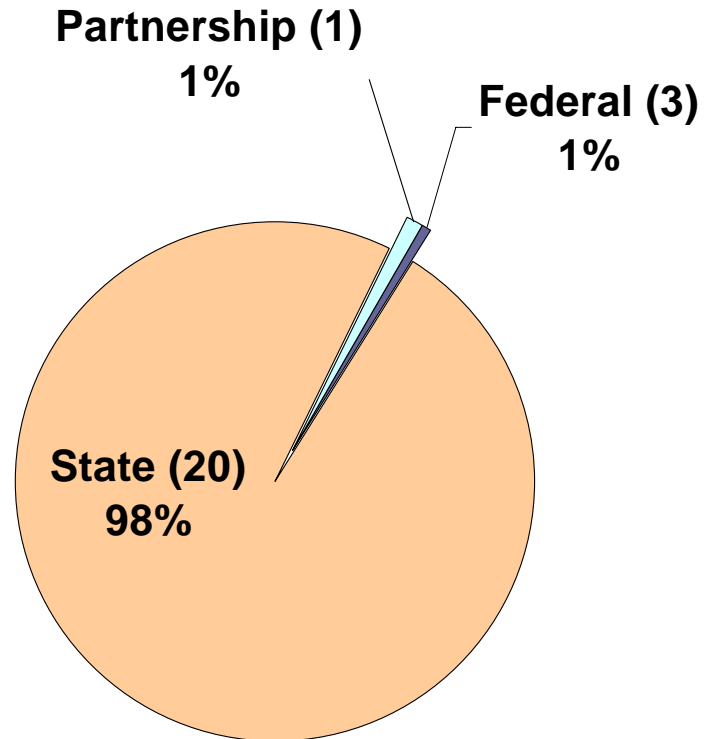
California state waters: 14,984 km²

California MMAs (0 -3 nm) Level of protection

Multiple use vs. No-Take



Who Manages No-Take MMAs?



- 97 % of California MMA area is multiple use
- State manages most No-Take area

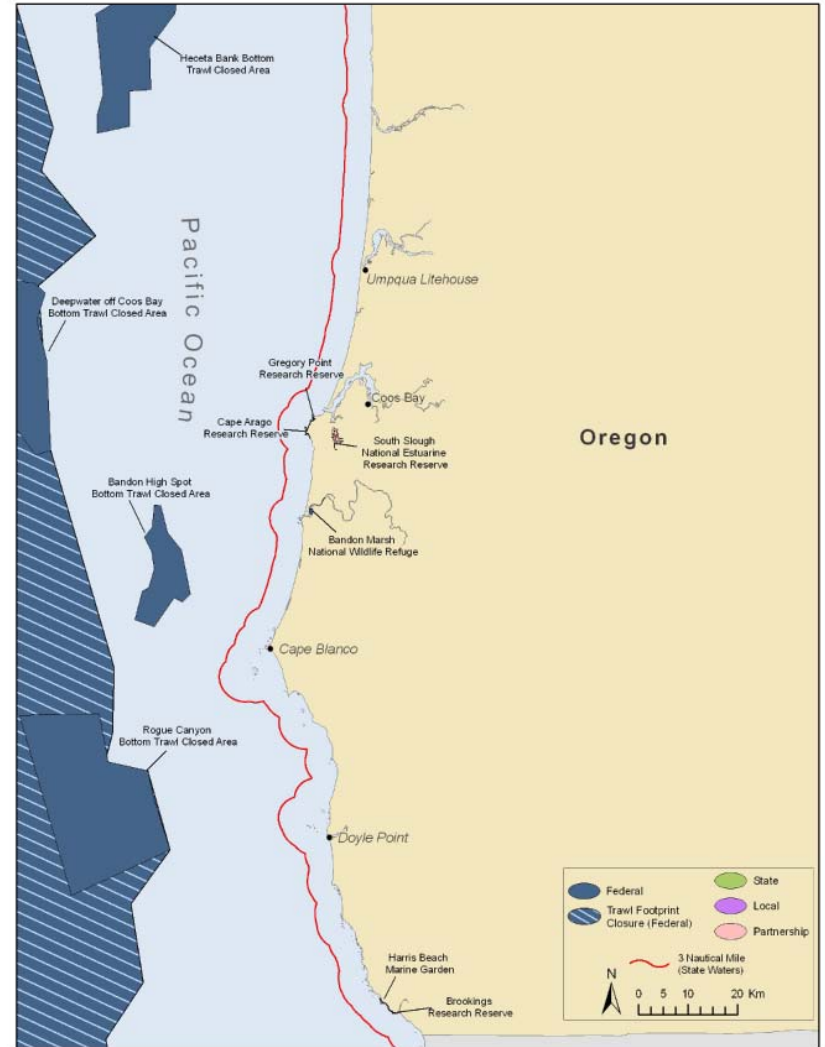
California (0 -3 nm) No-Take



- **Small fraction (3 %) is No-Take**
- **Total area in No-Take = 317 km²**
 - Area size of largest glacier in Yellowstone NP
- **CA has 93% of all No-Take area for West Coast**

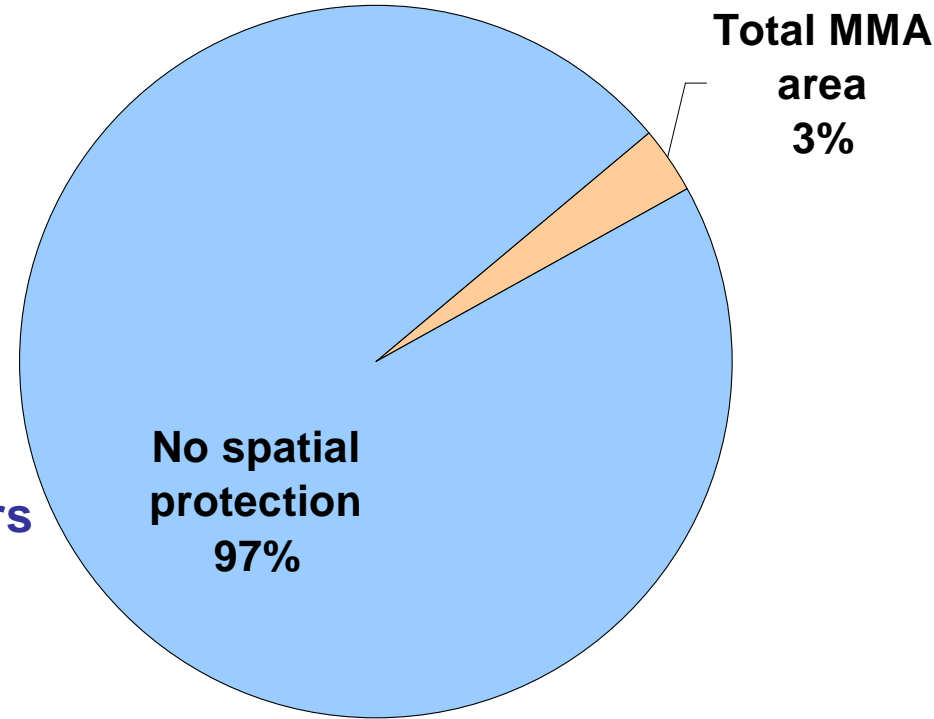
Oregon

Distribution of MMAs



Oregon State (0 - 3 nm)

- 22 MMAs, small fraction of OR waters
- Mainly estuary and marsh habitat
- No open water MMAs in state waters

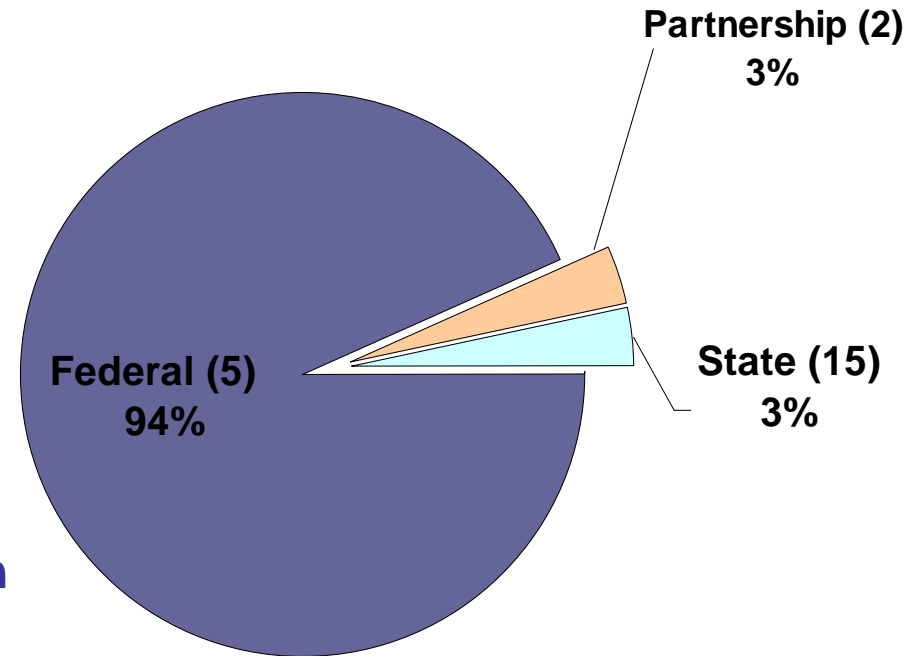


Oregon waters: 3,911 km²

Oregon (0 – 3 nm)

OR MMA Area by Level of Government

- More (3 X) state MMAs compared to federal
- But, federal MMAs cover much more area
- 4 National Wildlife refuges- Bandon Marsh, Nestucca Bay, Siletz Bay, and Lewis & Clark NWR
- Vast majority of OR's MMA area in one site- Lewis & Clark NWR

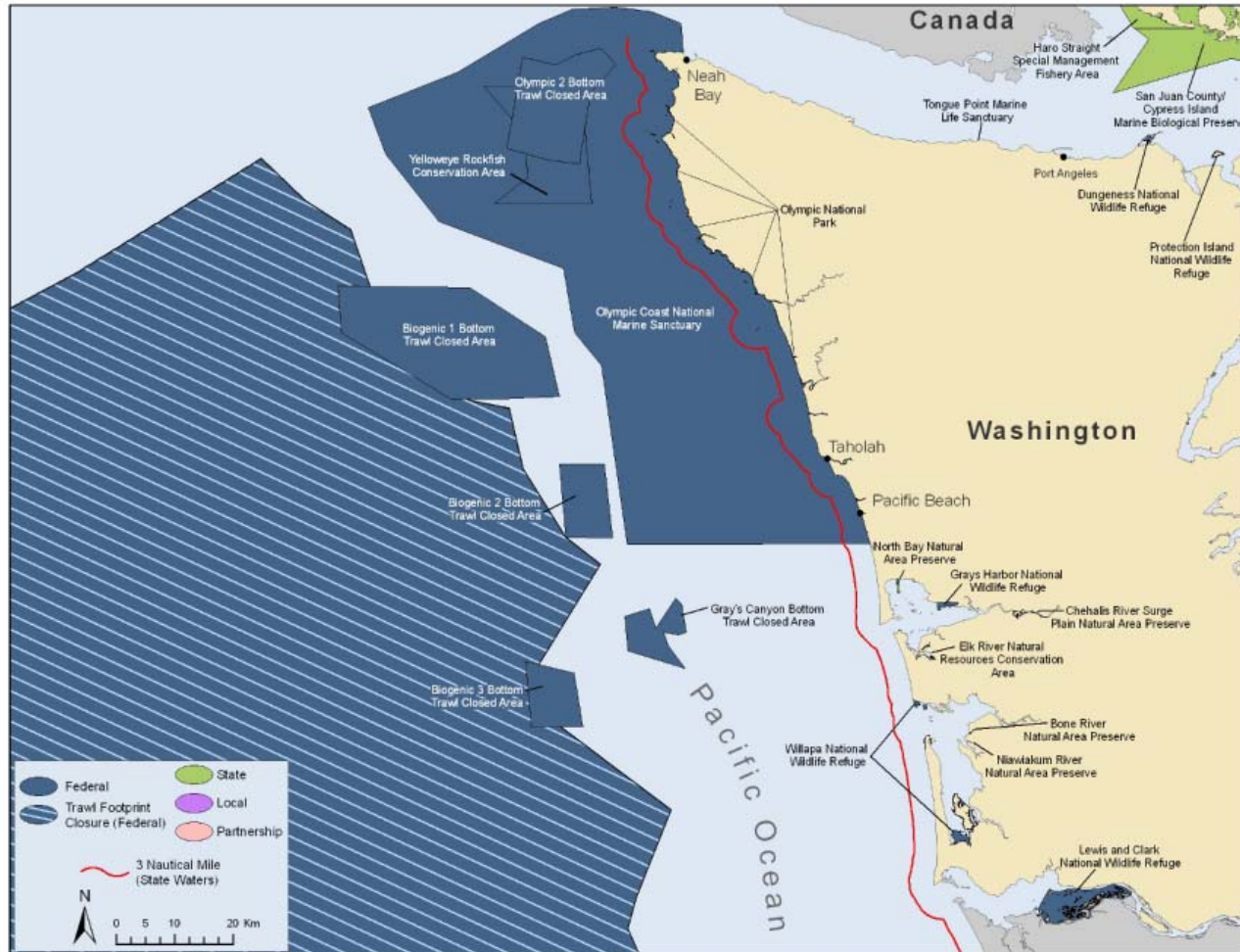


Oregon (0 -3 nm) No-Take MMAs



- **Tiny part of OR is No-Take; 6 km² total (smaller than Oregon State University campus)**
- **3 No-Take sites; Of these 2 are No Access (Nestucca Bay & Siletz Bay NWR)**
- **Only No-Take is Whale Cove Habitat Refuge, which is rocky intertidal and subtidal habitat**

Washington Distribution of MMAs

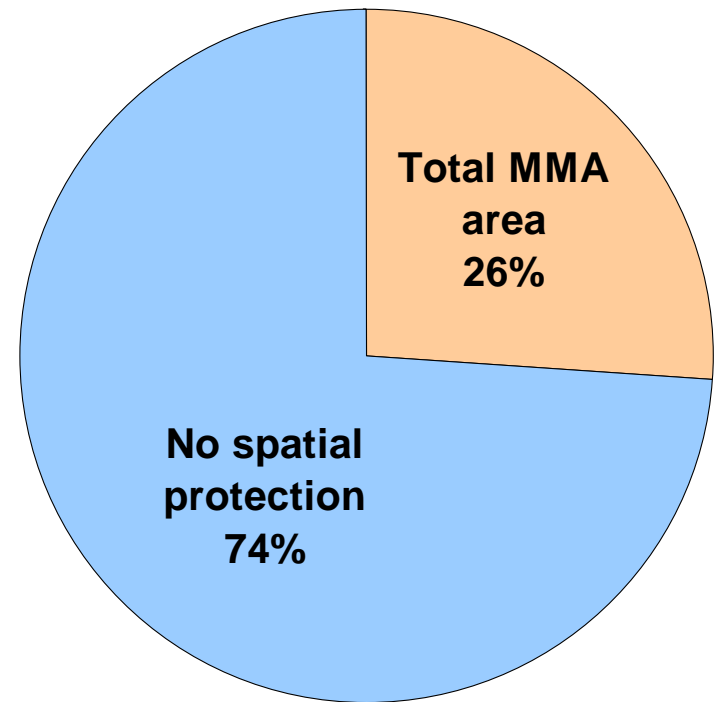


Washington Distribution of MMAs



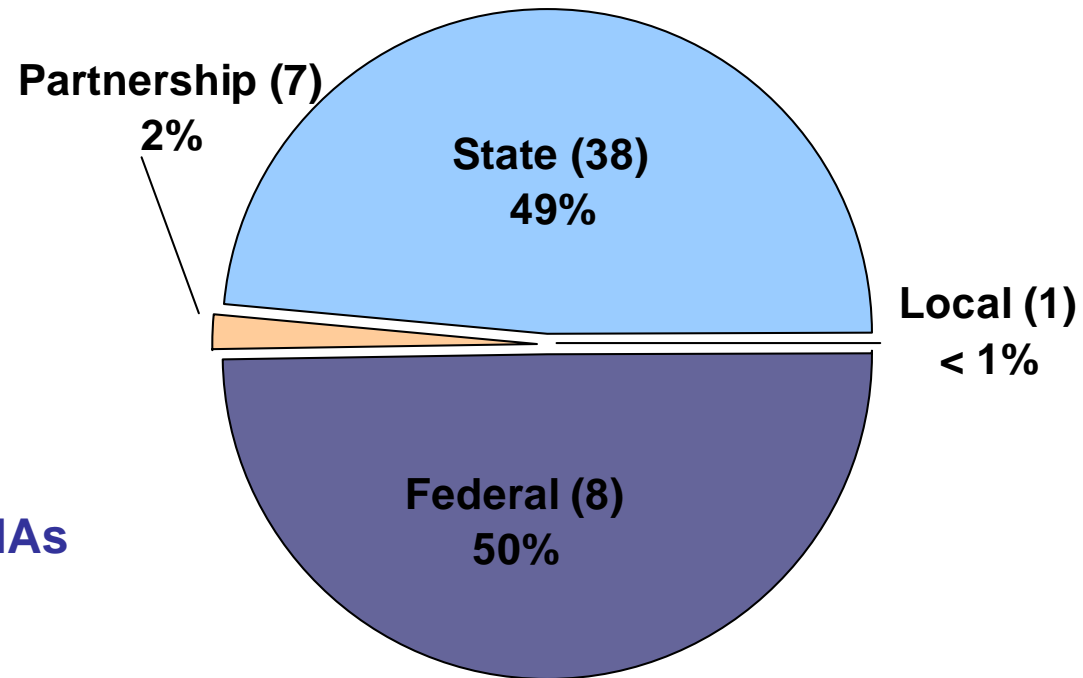
Washington State Waters (0 -3 nm)

- **54 MMAs**
- **A quarter of WA waters in MMAs**
- **Majority are in the protected waters of Puget Sound and Northwest Straits**
- **Most are close to shore in estuarine and marsh habitat**
- **One large MMA is an exception; Olympic Coast National Marine Sanctuary**



Washington waters: 10,030 km²

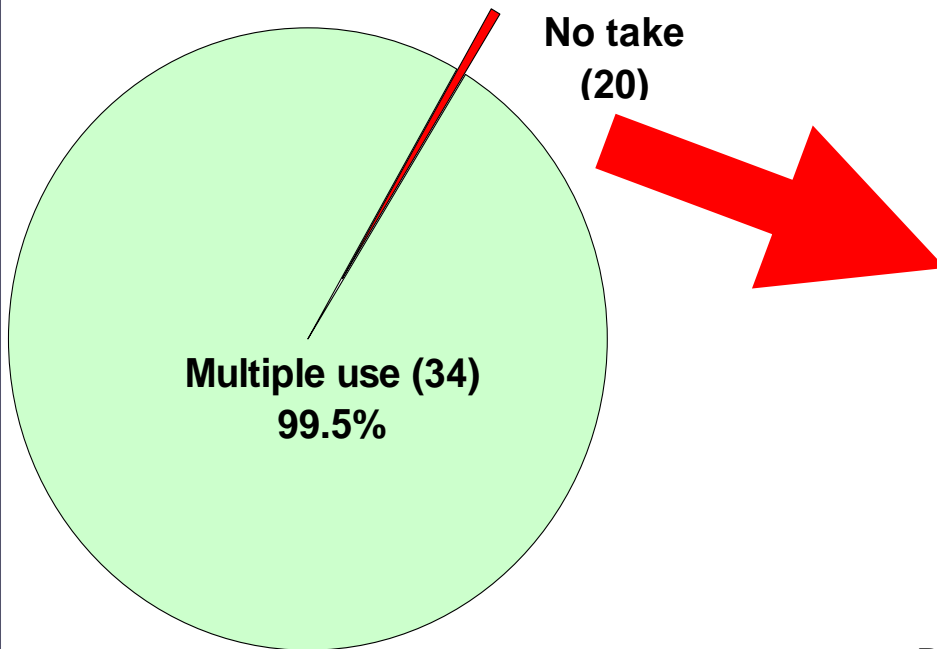
Washington MMA Area by Level of Government



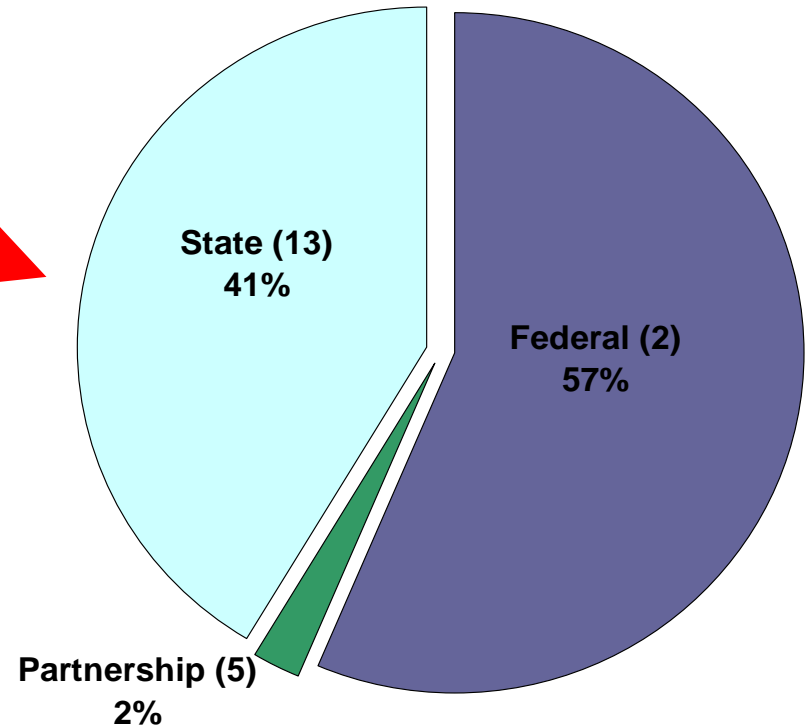
- Four times as many state MMAs than federal
- But nearly half area is managed by federal programs

Washington MMAs (0 – 3nm) Level of Protection

Multiple use vs. No-Take



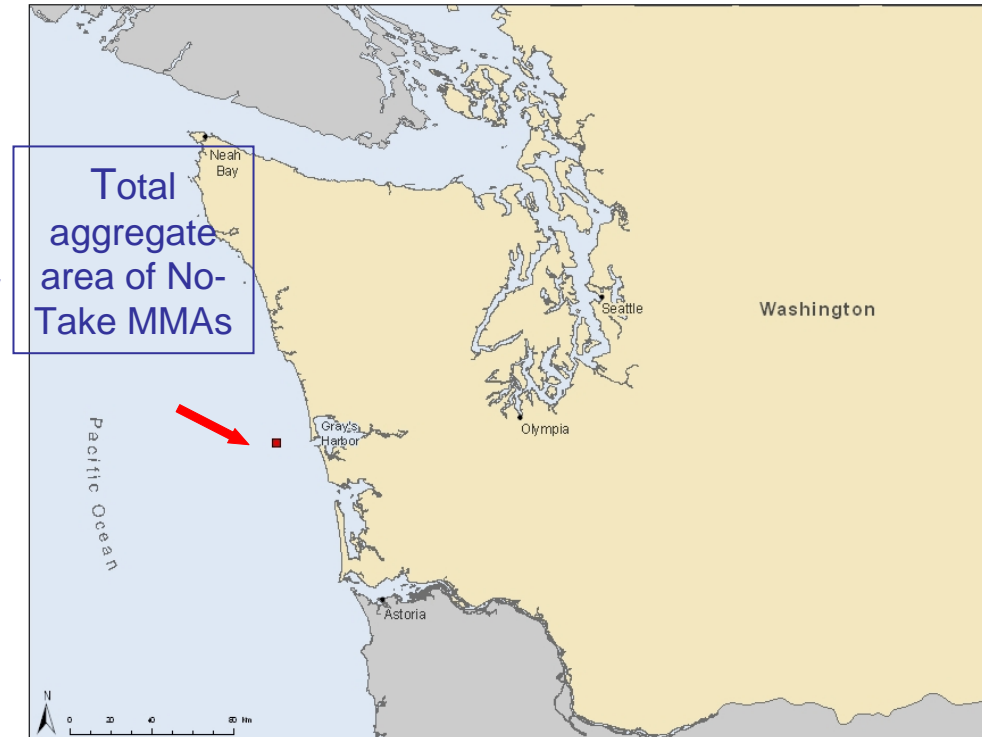
Who Manages No-Take MMAs?



- Less than 1% of Washington MMA area in No-Take MMAs
- Managed equally by state and federal programs

Washington Total No-Take

- 99.5% of area is multiple use
- Tiny fraction is No-Take (0.5 %)
- No-Take area managed equally by state and federal programs



Comparison of CA, OR, & WA

	California	Oregon	Washington
Total MMA area	6, 934 km²	121 km²	2,627 km²
% of State waters	46 %	3 %	26 %
Number	161	22	54
Mgt Agency	Federal & State	Federal	Federal & State
Protection Level	95 % multiple use	96 % multiple use	99.5 % multiple use
No – Take area	317 km ² Size of largest glacier in Yellowstone	6 km ² Size of Oregon State University campus	13 km ² Size of downtown Seattle

Next Steps

Evaluate effectiveness of existing MMAs

- **Identify habitat types protected**
- **Evaluate contribution of MMAs to achieving conservation objectives**
- **Assess human uses & impacts of those uses**
- **Identify gaps and priorities in spatial conservation management**

MPA Center Contacts

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West Coast Pilot Web Site:

mpa.gov/national_system/west-coast-pilot.html



Collaborators

MPA Center staff

NOAA Special Projects Office

National Marine Fisheries Service

National Marine Sanctuary Program

National Estuarine Research Reserve System

National Parks System

National Wildlife Refuge System

State Agency Contacts: CA, OR, WA

Coastal Zone Managers

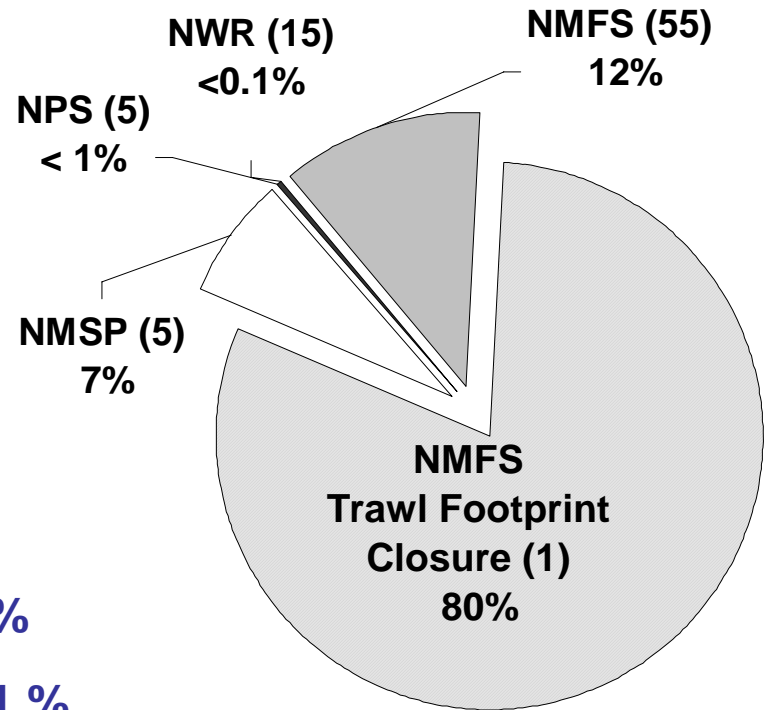
Coastal States Organization

Tribal Contacts

West Coast MMAs

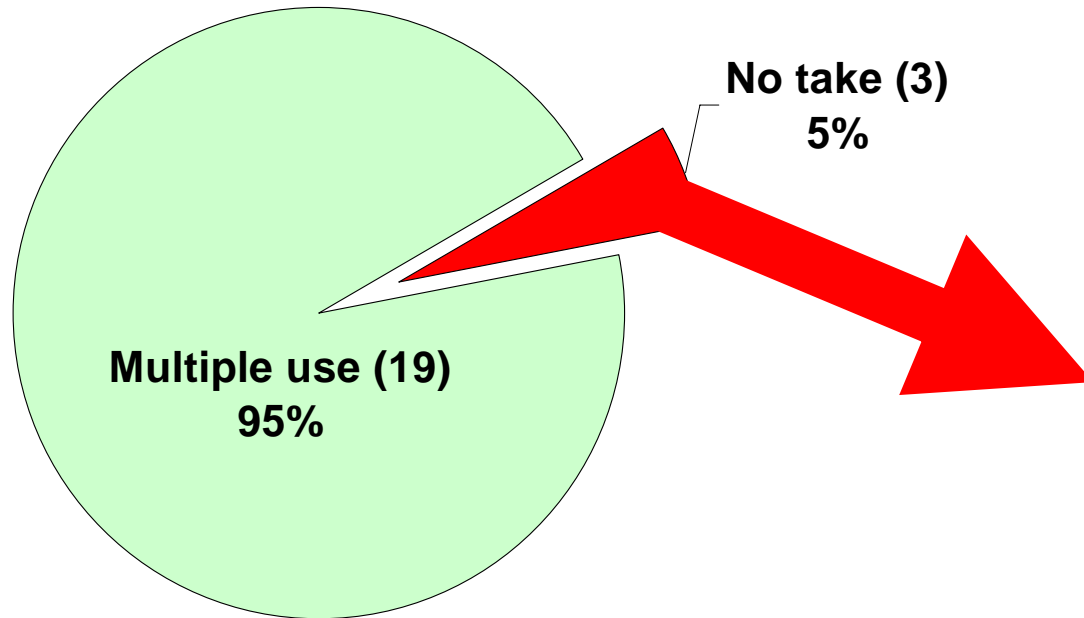
Federal agencies (by area)

- **Ntl. Marine Fisheries Service** 92 %
- **Ntl. Marine Sanctuary** 7%
- **Ntl. Park Service** < 1 %
- **Ntl. Wildlife Refuge** < 0.1 %
- **Ntl. Estuarine Research Reserve** < 0.001 %

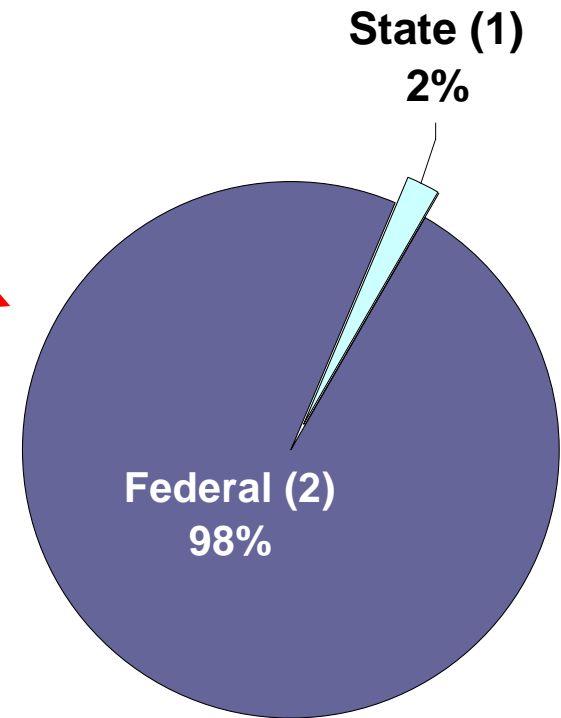


Oregon Level of Protection

Multiple use vs. No-Take



Who Manages No-Take MMAs?



- 5 % is No-Take, which is managed primarily by federal programs

Oregon State Management agencies

Oregon Department of Fish and Wildlife (ODFW)

- Marine Gardens
- Habitat Refuges
- Research Reserves
- Shellfish Preserves

Oregon's Division of State Lands

- National Estuarine Research Reserves— in partnership with NOAA

Washington State MMA programs

Washington Department of Natural Resources

- Natural Area Preserve
- Natural Resources Conservation Areas
- Aquatic Reserves

Washington Department of Fish and Wildlife

- Marine Preserves
- Wildlife Area
- Conservation Areas
- Natural Area Preserves
- Seabird Sanctuaries

Washington State Parks and Recreation Commission

- Underwater Park

County government

- Clallam County
- City and State government partnerships
- NERRS

California State programs

California Department of Fish and Game

- State Marine Parks
- State Marine Conservation Areas
- State Marine Reserves
- State Marine Cultural Preservation Areas
- State Marine Recreational Areas
- National Estuarine Research Reserves— in partnership with NOAA

State Water Resources Control Board

- Areas of Special Biological Significance

University of California

- Research Reserves