

Oregon's area-based
ocean management:
*Informing the future of a
changing ocean*

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Oregon's Marine Reserves

ODFW's monitoring charts the course for baseline understanding of typical marine reserve metrics: species size, biomass, frequency of occurrence, etc.

AND the external collaborations between ODFW and others are examples of the partnerships, leveraging, and synthesis that characterize Oregon's marine reserves as research reserves.



Three Main Messages

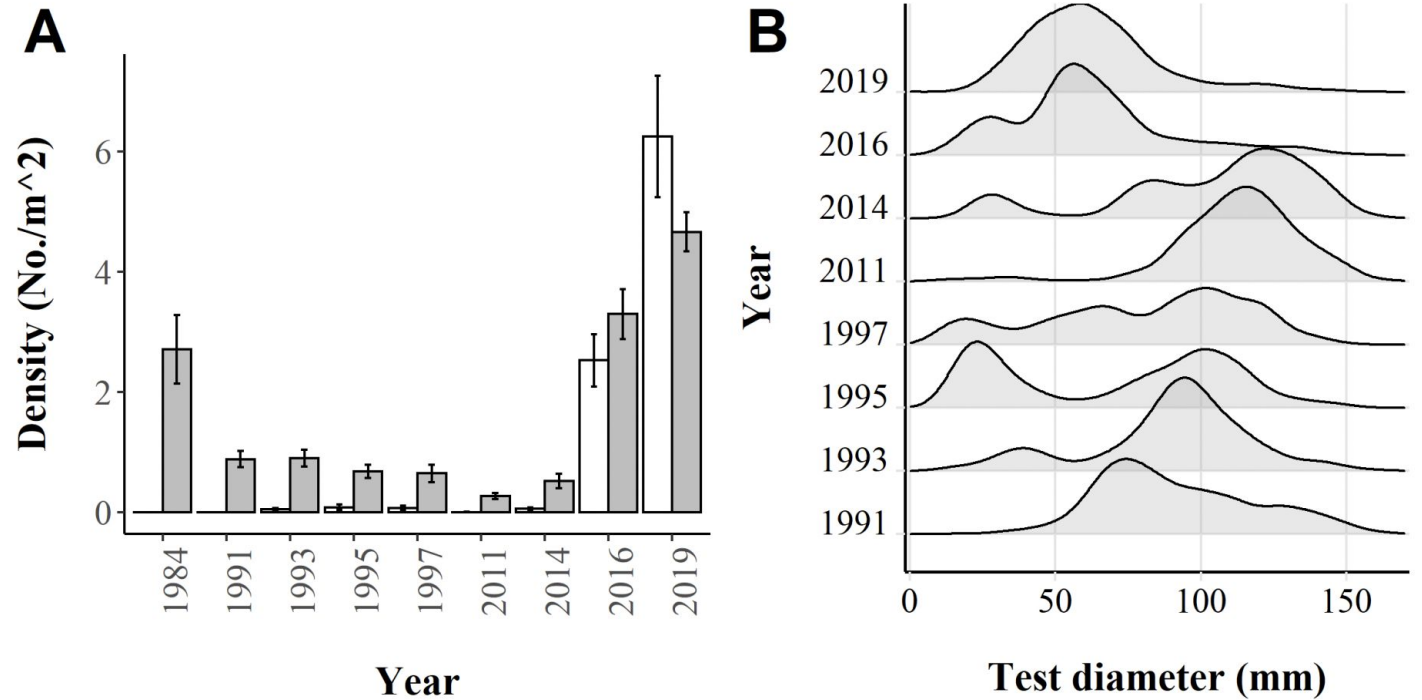
1. Oregon's area-based conservation in marine reserves is providing some of the best **science advances** in Oregon's nearshore.
2. This monitoring and research approach makes Oregon **globally relevant**.
3. We can actively use this research and an **evolving approach** for management-relevant **syntheses** and in national to international **policy conversations**.

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Collaborative marine reserves research is helping to better understand the dynamics of important species

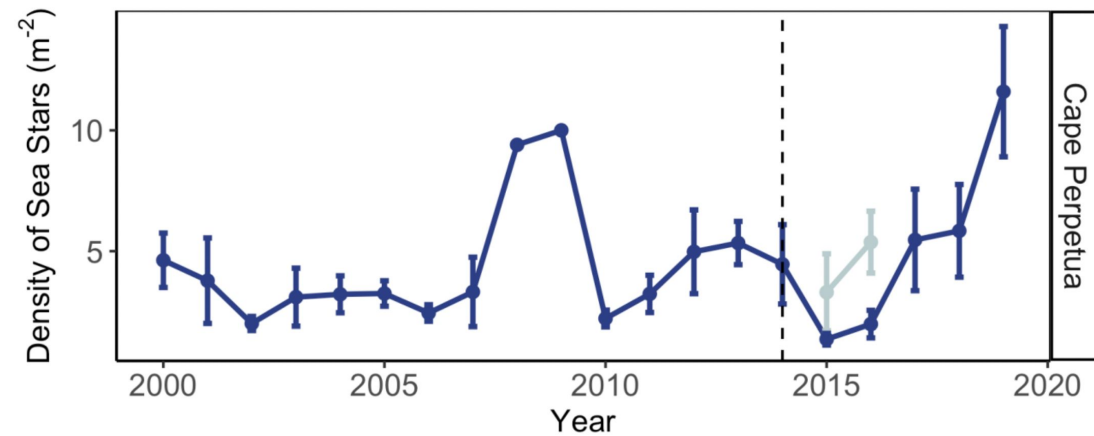
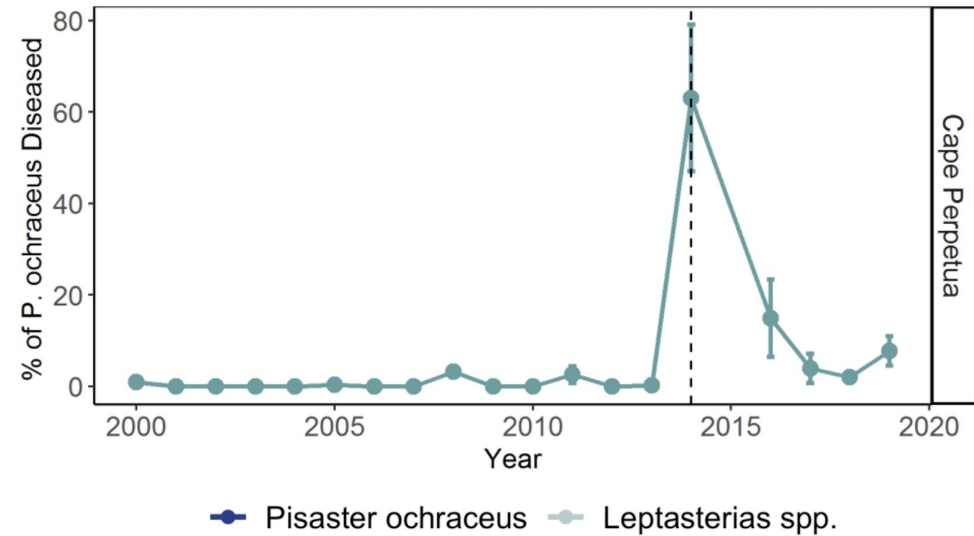
*Scott Groth et al. 2022.
ODFW Monitoring Report
Appendices.*



Example: Research on history and trends in Oregon's red urchin fishery

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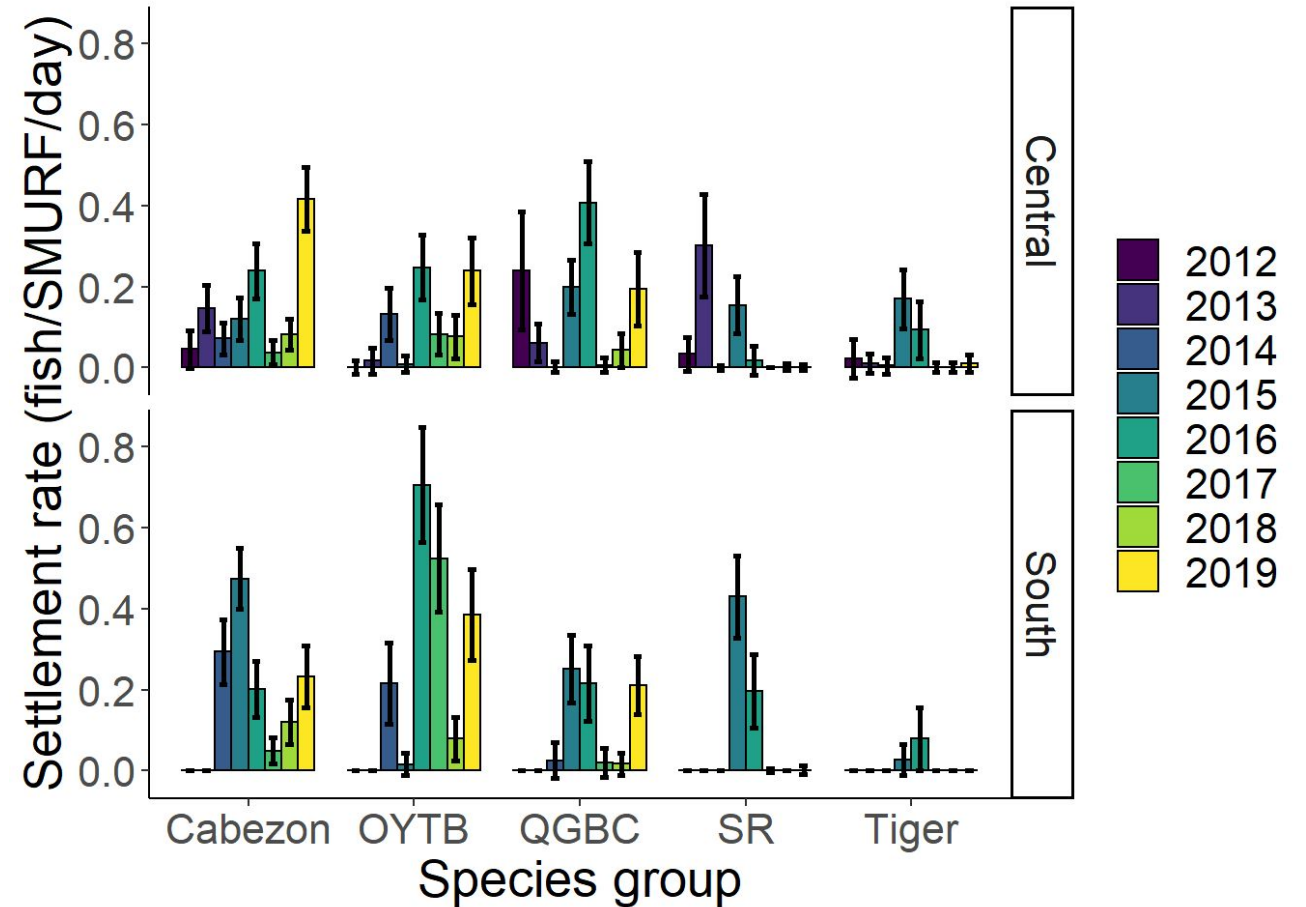
Sarah Gravem, Bruce Menge, Lindsay Aylesworth. 2022. ODFW Monitoring Report Appendices



Example: Rapid research response to Sea Star Wasting Disease

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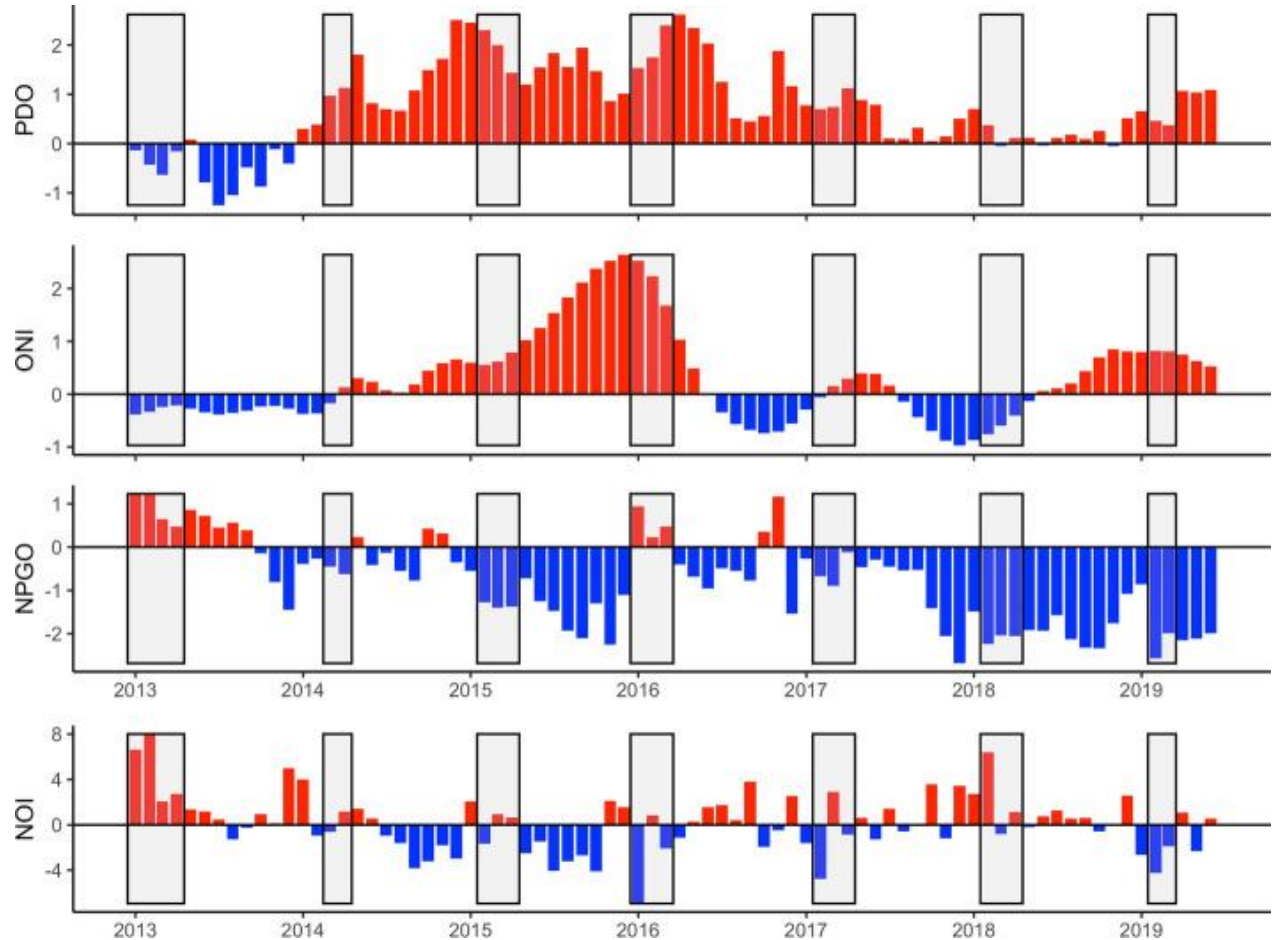
Megan Wilson, Kirsten Grorud-Colvert, Su Sponaugle.
2022. ODFW Monitoring Report Appendices.



Example: Variability in rockfish recruitment with changing ocean conditions

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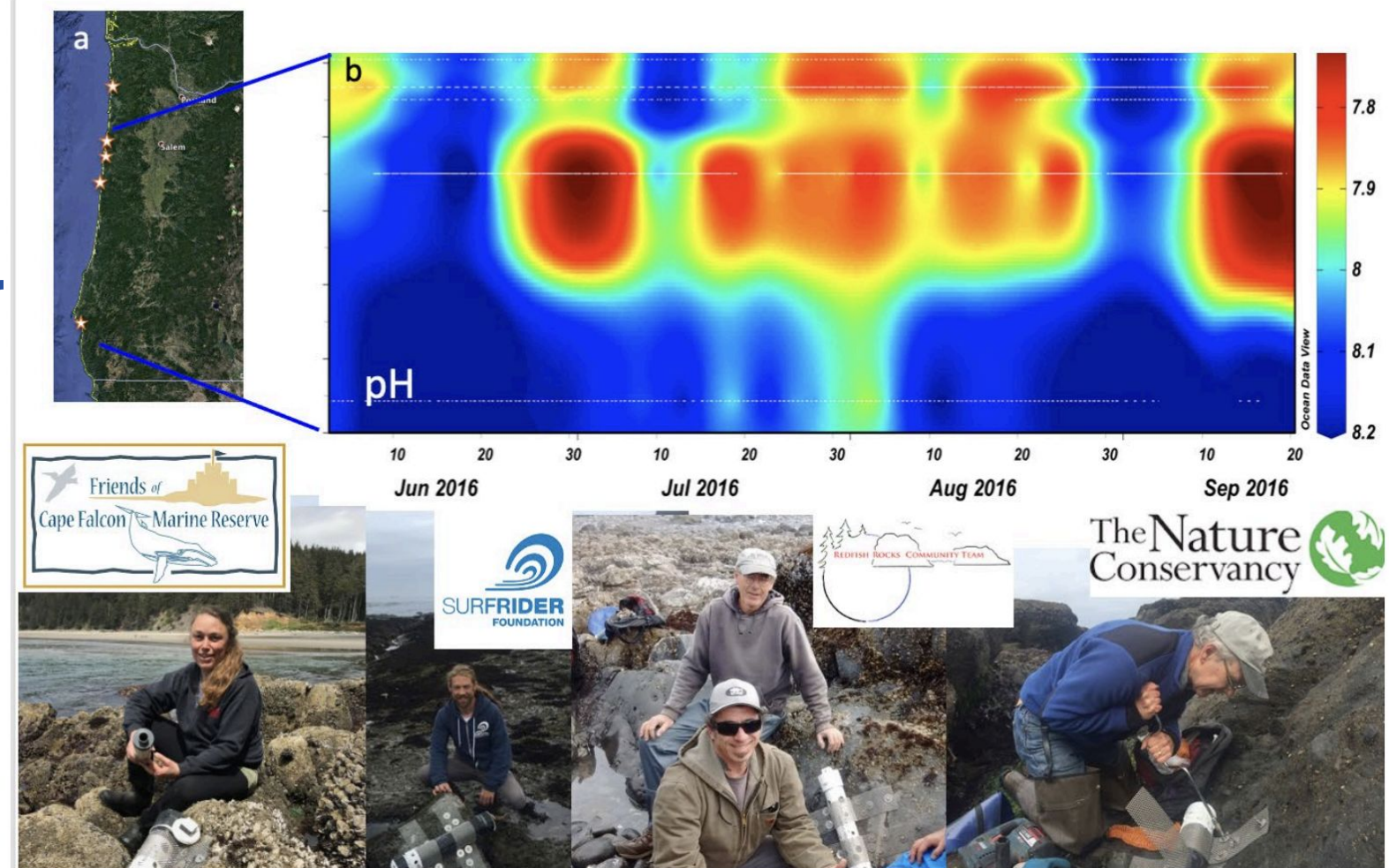
Will Fennie, Kirsten Grorud-Colvert, Su Sponaugle. 2023. Scientific Reports (Nature Publishing Group).



Example: Variability in rockfish recruitment with changing ocean conditions

Collaborative marine reserves research is helping to better understand the physical dynamics of the Oregon nearshore

*Francis Chan et al. 2022.
ODFW Monitoring Report
Appendices.*

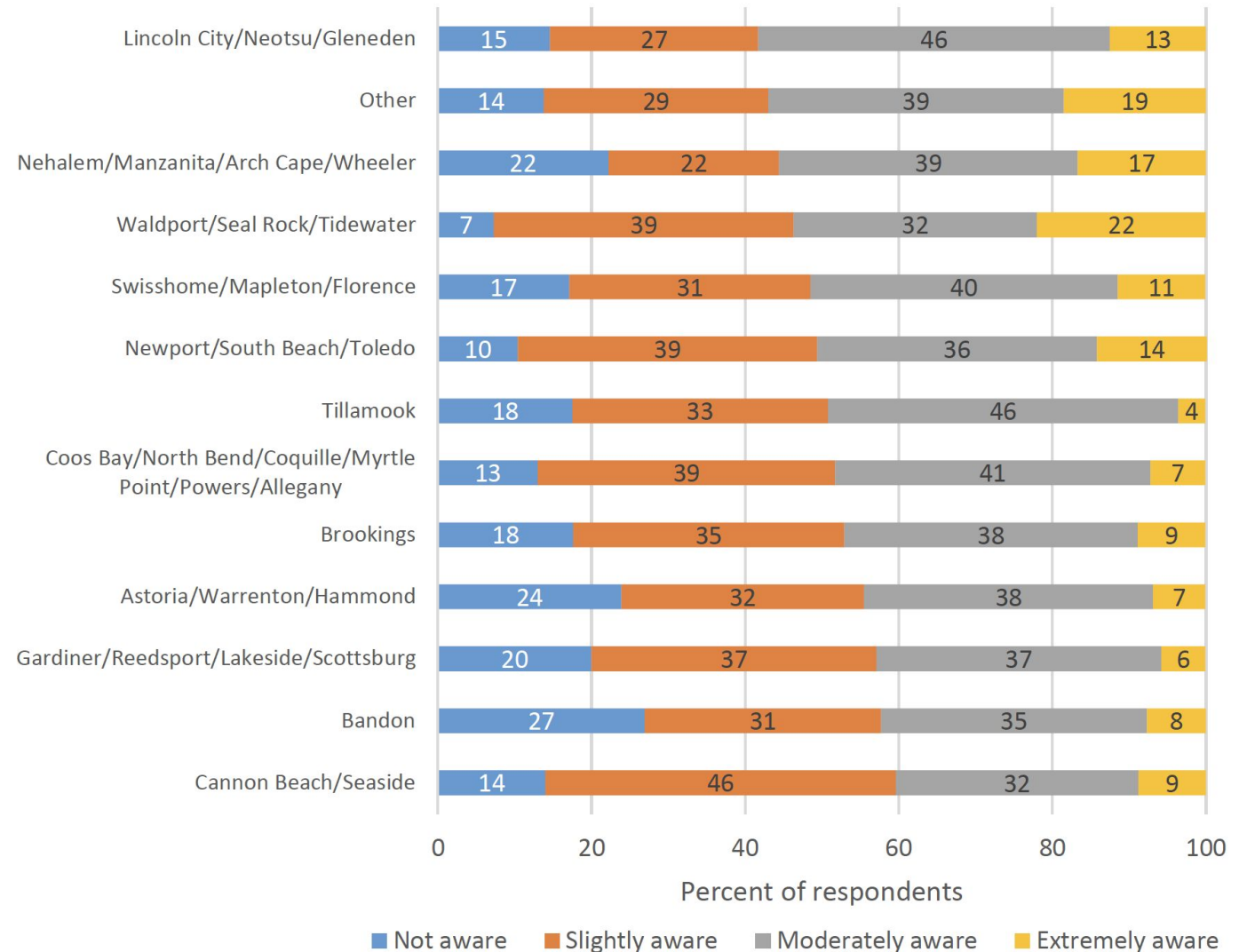


Example: the citizen scientist-supported OA monitoring network

Collaborative marine reserves research is helping to better understand the human dimensions of marine reserves

*Kreg Lindberg & Katie Williams. 2019.
Report: Oregon Coastal Community Well-Being Assessment.*

science advances



Example: Understanding of different communities' awareness of marine reserves

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global relevance

important species

physical dynamics

human dimensions

holistic picture of
marine reserves

which makes
Oregon a leader in
MPA monitoring
and area-based
conservation
research

We know that Oregon is a leader in MPA implementation, monitoring and research, because a new system exists to compare MPAs globally

Kirsten Grorud-Colvert et al. (42 co-authors!) 2021. Science.

The MPA Guide: A framework to achieve global goals for the ocean

KIRSTEN GRORUD-COLVERT, JENNA SULLIVAN-STACK, CALLUM ROBERTS, VANESSA CONSTANT, BARBARA HORTA E COSTA, ELIZABETH P. PIKE, NAOMI KINGSTON, DAN LAFFOLEY, ENRIC SALA, JOACHIM CLAUDET, ALAN M. FRIEDLANDER, DAVID A. GILL, SARAH E. LESTER, JON C. DAY, EMANUEL J. GONÇALVES, GABBY N. AHMADIA, MATT RAND, ANGELO VILLAGOMEZ, NATALIE C. BAN, GEORGINA G. GURNEY, ANA K. SPALDING, NATHAN J. BENNETT, JOHNNY BRIGGS, LANCE E. MORGAN, RUSSELL MOFFITT, MARINE DEGUIGNET, ELLEN K. PIKITCH, EMILY S. DARLING, SABINE JESSEN, SARAH O. HAMEED, GIUSEPPE DI CARLO, PAOLO GUIDETTI, JEAN M. HARRIS, JORGE TORRE, ZAFER KIZILKAYA, TUNDI AGARDY, PHILIPPE CURY, NIRMAL J. SHAH, KAREN SACK, LING CAO, MIRIAM FERNANDEZ, AND JANE LUBCHENCO

Authors Info & Affiliations

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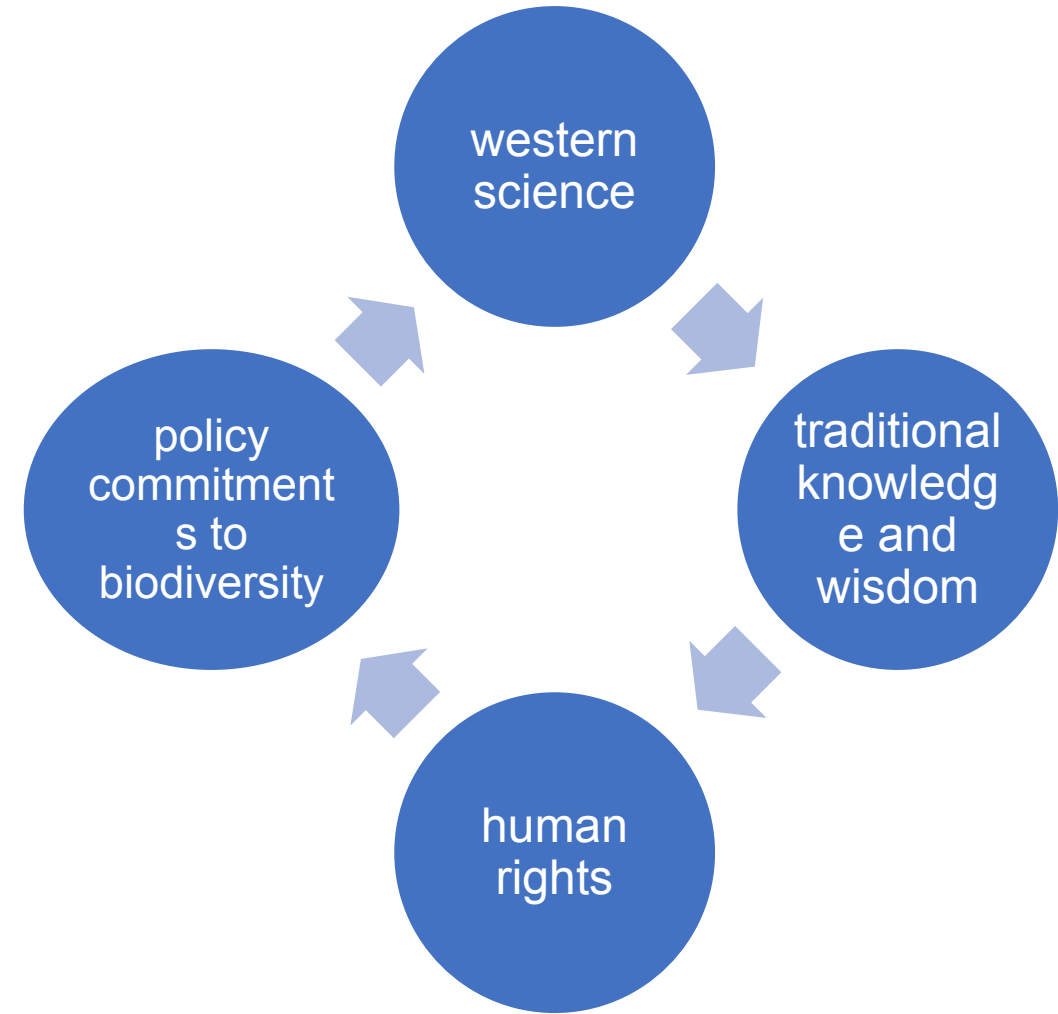


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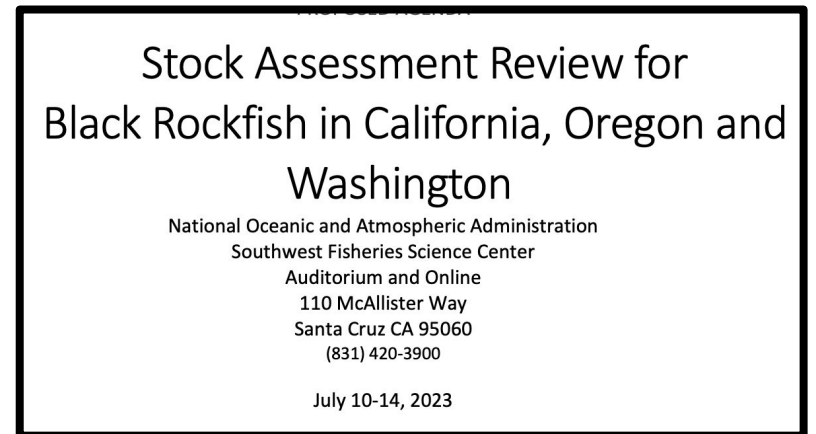
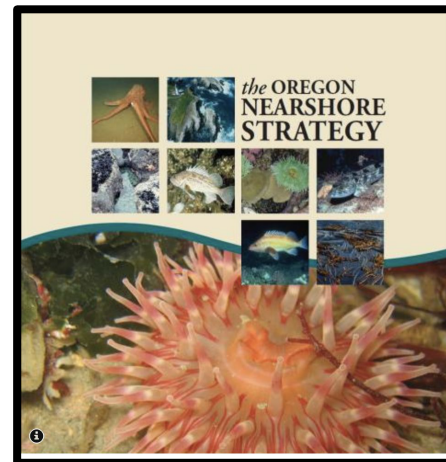
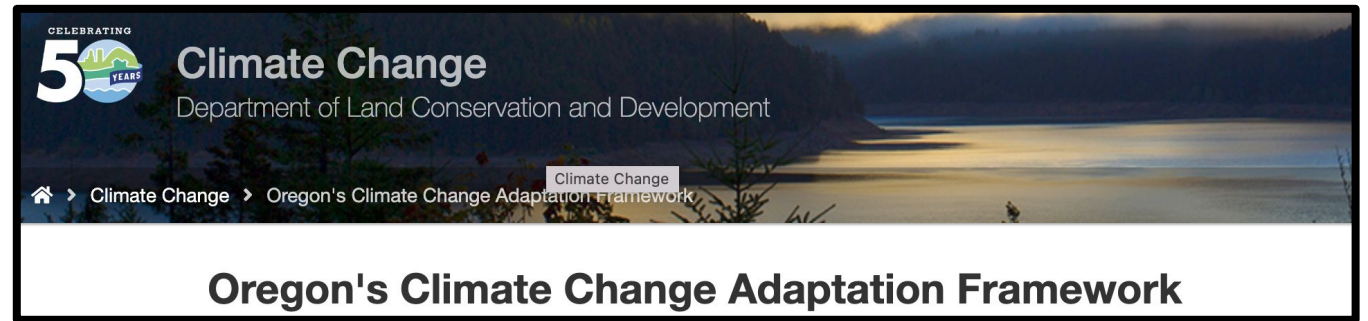
evolving approach

There are opportunities to partner and learn from traditional knowledge to improve research and management



syntheses for management

There are opportunities to incorporate these data into stock assessments, MR adaptive management, and climate change adaptation plans



There are opportunities to incorporate Oregon's experience into national policy conversations and international policy conversations



MAY 06, 2021

Biden-Harris Administration Outlines “America the Beautiful” Initiative



United Nations CITY CONVENTII

KUNMING-MONTREAL GLOBAL BIODIVERSITY FRAMEWORK

For Discussion

How can the time series and data snapshots from Oregon's marine reserves be best used to characterize our changing ocean?

How can we amplify the research and monitoring experience from Oregon's marine reserves at national and international levels?

How do Oregon's marine reserve data inform a path forward for future study and future policy?

Thank you!

Kirsten Grorud-Colvert

*On behalf of many other collaborators
and partnering organizations*

EXTRA

