

# Data considered for use in the ecological atlas

ID	Data Name	Data Format			Directly applicable to TSP MSP				Applicable to MSP in Federal waters or future TSP			Data Gaps					
		Original Database	Derived GIS Data Layer	Literature Reference	Marine Map	Marxan Analysis	Considered in siting	Env. Predictor in model	Currently ready	Ready after current TSP timeline	Possible to develop with further work	Area-wide data exist, no spatial depiction	Only site-specific data exist	No data available	Variable resolution &/or quality	Dataset exists but NOT in hand?	Synthesis/modeling needed?
<b>Habitat</b>																	
1	OSU seafloor habitat map (v. "3.6")	x	x		x	x	x	x	x						x		
2	OSU seafloor habitat map (v. 4.0)	x	x							x					x		
3	Bathymetry	x	x		x	x		x	x								
4	Rocky intertidal shoreline		x		x	x	x		x								
5	Sandy intertidal shoreline		x		x	x	x		x								
6	Subtidal biogenic habitat		x								x	x	x		x		x
7	Other subtidal habitat numeric descriptors (BPI index, slope, rugosity, etc.) derived from z data		x								x	x					
8	ODFW kelp canopy composite as proxy for subtidal rock		x			x	x		x				x		x		
9	Shoreline habitat classification from Shorezone mapping projects	x	x							x							
10	Biological component of benthic habitat										x		x				x
11	Survey of benthic communities near potential renewable energy sites offshore the PNW(current-BOEMRE-funded study)	x	x							x			x				x
12	Water column habitat										x	x					x
13	Habitat Areas of Particular Concern (HAPC)	x			x		x		x								

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<b>Algae</b>																	
14	Composited maximum extent of kelp beds base on all surveys since 1990	x	x	x	x	x	x		x								
15	Regional kelp surveys 1990,1996-99, 2010	x	x	x					x								
16	Historical N.O.S. "Smooth Sheet" data (1868-1958)	x															
<b>Invertebrates</b>																	
17	Site-specific studies and inventories for intertidal and subtidal invertebrates	x								x	x		x				x
18	Invertebrate data from NMFS annual (2004-2009) and triennial (1974-2004) trawl surveys	x									x	x					x
19	PISCO rocky intertidal community data	x									x					x	x
20	Survey of benthic communities near potential renewable energy sites offshore the PNW (current BOEMRE-funded study)	x	x							x			x				x
21	Commercial fishery logbook data from shrimp, urchin, razor clam fisheries.	x									x	x				x	x
22	Commercial Dungeness crab fishery logbook data for the 2007-08 and 2009-10 seasons	x															
23	Model output using commercial crab fishery logbook data		x		x	x	x		x								
24	Razor clam biological surveys	x									x		x				x

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<b>Fish</b>																	
25	NMFS annual shelf trawl survey 2004-2009	x		x					x								x
26	NMFS triennial trawl survey 1977-2004	x		x					x								x
27	NMFS Pacific Whiting Biannual Survey																x
28	ODFW Flatfish trawl survey 1974-75	x		x					x								x
29	Model output using NMFS and ODFW trawl surveys - total fish abundance		x		x	x	x		x								
30	Model output using NMFS and ODFW trawl surveys - total fish biomass		x		x	x	x		x								
31	Model output using NMFS and ODFW trawl surveys - fish species richness		x		x	x	x		x								
32	Model output using NMFS and ODFW trawl surveys - fish species diversity		x		x	x	x		x								
33	Model output using NMFS and ODFW trawl surveys - total abundance of nearshore flatfish group		x		x	x	x		x								
34	Model output using NMFS and ODFW trawl surveys - total biomass of nearshore flatfish group		x		x	x	x		x								
35	Model output using NMFS and ODFW trawl surveys - selected species abundance		x								x	x					x

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36	OSU coastal beam trawl studies 1977-1979	x		x							x		x				x
37	OSU central Oregon shelf flatfish demersal fish studies 1989-1994 (referred to as the "Toole data" or the "Markle data")	x		x							x		x				
38	International Pacific Halibut Commission survey data 2007-2009	x									x	x					x
39	Commercial groundfish trawl fishery logbook data 1982-2009	x															x
40	Model output using commercial groundfish fishery logbook data - selected species presence		x		x	x	x		x								
41	Commercial fishery logbook data from nearshore hook and line fishery, fixed gear fishery, and sardine fisheries.	x									x	x				x	x
42	site-specific studies and inventories for intertidal and subtidal fishes	x								x	x		x				x
43	Groundfish fishery observer study in the 1980's (referred to as the "Pikitch data")	x									x	x			x		x
44	ESA-listed Green Sturgeon Critical Habitat		x	x	x	x			x								
45	Green Sturgeon migration corridor			x							x	x					
46	NMFS Habitat Suitability Probability (HSP)maps of juvenile groundfish		x	x	x	x	x		x								
47	Forage fish surveys												x				x
48	Winter fish surveys													x			x
49	Juvenile fish surveys												x				x

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<b>Seabirds</b>																	
50	Seabird nesting colony locations and counts	x	x	x	x	x	x		x								
51	Point Reyes Bird Observatory (PRBO) modeled combined seabird abundance, persistence and importance		x	x		x	x		x								
52	PRBO top 2.5% modeled combined seabird abundance, persistence and importance		x	x	x				x								
53	PRBO modeled abundance for individual seabird species		x	x							x	x					
54	Seabird surveys used in PRBO modeling															x	
55	Crescent Coastal Research (CCR) nearshore seabird abundance and distribution surveys ("Craig Strong data")	x	x	x	x	x	x		x								
56	GLOBEC 2000 and 2002 seabird surveys over the shelf off of central and southern Oregon	x		x					x								x
57	CCES 2008 survey (used in PRBO modeling)	x		x							x	x					
58	ESA-listed Western snowy plover Critical Habitat (2005)		x	x	x	x	x		x								
59	EBASCO seabird survey and all published observations (MMS sponsored aerial surveys 1989-1990)	x		x							x	x					x
60	Winter seabird abundance and distribution												x	x			

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<b>Mammals</b>																	
61	EBASCO marine mammal survey and database of all published observations (MMS sponsored aerial surveys 1989-1990)	x		x							x	x					
62	Pinniped haulout location and counts	x	x		x	x	x		x								
63	ESA-listed Stellar sea lion Critical Habitat		x		x	x	x		x								
64	Harbor porpoise data from Jeff Laake											x					x
65	Harbor porpoise data from CCR nearshore seabird surveys	x	x		?	?					x	x					
66	Winter harbor porpoise data													x			
67	Pinniped foraging areas													x			
68	Predictive modeling of cetacean densities		x	x	?	x	x		x								
69	Cetacean surveys used in predictive modeling of cetacean densities	x	x	x													
70	Gray whale migration corridor information			x							x		x				
71	Resident gray whale siting data from CCR nearshore seabird surveys	x	x		?	?				x		x					
72	Gray whale model from Paramatrix															x	
73	October, November resident gray whale data													x			

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<b>Apex Predators</b>																	
74	Apex predator distribution and abundance		x	x						x						x	
75	ESA-listed Leatherback Sea Turtle Critical Habitat		x		x		x		x								
<b>Oceanography</b>																	
76	Chlorophyll-A concentration (Jun-Sep, 1988-2005)		x		?	?	?	x									
77	Persistent upwelling areas (Jun-Sep, 1984-2004)		x		?	?	?	x									
78	Columbia River plume	?															
79	Ocean fronts	?															
80	Retention areas	?															
81	Near-bottom Dissolved Oxygen (July-Sep, 1950-1980)	x	x	x	?		?		x	x							