

*Journal: Fishes, Special Issue: Effect of Climate Change on Salmonid Fishes in Rivers*

**Supplement S2:** *Complete list of literature used in the quantification of categories and the labels assigned to each citation*

**Supporting information for:**

*A comprehensive review of the impacts of climate change on salmon: strengths and weaknesses of the literature by life stage*

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**Key words:** anadromous fish; ecological responses to climate change; future projections; global change; ocean; freshwater

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Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1	6to10	California	California_S	Field/ RemoteSensing, Lab/ Experimental	O. mykiss	Evolution	NA	Genetics_Adaptation		Evolution
2	NA	Mountain_west	NA	Review/ MetaAnalysis	Other_fish	General	Flow, Habitat, Temperature_ FW	Genetics_Adaptation, Habitat_Distribution	Environment,	Dispersal, Evolution
3	10plus	Largescale	NA	Projections/ salmon	O. keta, O. kisutch, O. mykiss, O. nerka, O. tshawytscha	Marine	Temperature_ FW	Habitat_Distribution	Environment,	Dispersal
4	2to5	Japan	NA	Lab/ Experimental	O. keta	Upmigration	Temperature_ FW	Physiology_Condition	Environment,	Physiology
5	10plus	California	California_S	Field/ RemoteSensing	Other_species	Marine	Predators	Behaviour, Mortality	Species_interactions,	Dispersal, Demography
6	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Juvenile, Marine, Outmigration	NA	Growth, Mortality, Phenology		Demography, Physiology
7	2to5	Northwest	NA	Lab/ Experimental	O. tshawytscha	Juvenile, Outmigration	Ecosystem, Invasives, Prey	NA	Species_interactions,	NA
8	NA	California	California_CV	Model	O. tshawytscha	Egg, Juvenile, Outmigration	Management	NA	, Management	NA
9	2to5	Alaska	Alaska_S	Field/ RemoteSensing	O. kisutch	Egg	NA	Phenology, Population_resilience		Demography
10	10plus	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. keta	Upmigration	Climate_indices, Flow, Predators	Phenology	Species_interactions, Environment,	Demography
11	1	California	California_CV	Field/ RemoteSensing, Lab/ Experimental	O. tshawytscha	Outmigration	Dissolved_oxygen, Habitat, Management, Prey, Temperature_ FW	Growth	Species_interactions, Environment, , Management	Physiology
12	10plus	California	California_N, California_S	Field/ RemoteSensing	Other_species	Marine	Ecosystem, Predators	NA	Species_interactions,	NA
13	NA	Largescale	NA	Model, Projections/ ecosystem	General	Marine	Ecosystem	NA	Species_interactions,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
14	10plus	British_Columbia	British_Columbia_not_Fraser	Model, Theoretical/Opinion	O. nerka	Marine, Population	Flow	Mortality, Productivity	Environment,	Demography
15	1	British_Columbia	British_Columbia_not_Fraser	Lab/Experimental	O. tshawytscha	Juvenile, Outmigration	Dissolved_oxygen, Genetics	Genetics_Adaptation	Evolution, Environment,	Evolution
16	2to5	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Juvenile	Disease, Dissolved_oxygen, Temperature_FW	Behaviour, Mortality	Species_interactions, Environment,	Dispersal, Demography
17	NA	British_Columbia	British_Columbia_not_Fraser	Lab/Experimental, Theoretical/Opinion	O. nerka, O. tshawytscha	General	Temperature_FW	Genetics_Adaptation, Physiology_Condition	Environment,	Evolution, Physiology
18	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	General	Freshwater_habitat	Habitat	Habitat_Distribution	Environment,	Dispersal
19	10plus	Mountain_west	NA	Projections/salmon	O. clarkii	Freshwater_habitat, Juvenile	Invasives, Temperature_FW	NA	Species_interactions, Environment,	NA
20	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. clarkii	Population	Flow, Habitat, Invasives, Temperature_FW	Growth, Habitat_Distribution	Species_interactions, Environment,	Dispersal, Physiology
21	NA	British_Columbia, Largescale, Northwest	NA	Model, Projections/ecosystem	General, O. tshawytscha	Marine	Contaminants, Ecosystem, Predators	Physiology_Condition	Species_interactions, Environment,	Physiology
22	NA	Largescale	NA	Model, Projections/ecosystem	Other_species	General	Ecosystem, Predators, Temperature_marine	Population_resilience	Species_interactions, Environment,	Demography
23	1	Mountain_west	NA	Field/RemoteSensing	Salmonid_general	Evolution, Juvenile	Disease	NA	Species_interactions,	NA
24	1	California	California_N	Field/RemoteSensing	Salmonid_general	Upmigration	Disease	NA	Species_interactions,	NA
25	NA	NA	NA	Review/MetaAnalysis	General	General	Temperature_FW	Physiology_Condition	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
26	1	Europe	NA	Field/ RemoteSensing	S. salar, S. trutta	Upmigration	Contaminants, Methods	Behaviour	Environment,	Dispersal
27	10plus	East_North_America, Europe	NA	Field/ RemoteSensing	S. salar	Egg, Marine, Population	Ecosystem, Temperature_ marine	Productivity	Species_interactions, Environment,	Demography
28	10plus	Europe	NA	Field/ RemoteSensing, Projections/ salmon	S. trutta	Population	Temperature_ FW	Population_resilience, Productivity	Environment,	Demography
29	2to5	Europe	NA	Field/ RemoteSensing	S. salar	Population	Management	Genetics_Adaptation	, Management	Evolution
30	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Marine	Environment, Fisheries, Temperature_ marine	Habitat_Distribution	Environment, , Management	Dispersal
31	1	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Upmigration	Flow, Habitat, Temperature_ FW	Genetics_Adaptation	Environment,	Evolution
32	NA	Asia_other	NA	Lab/ Experimental	O. keta, O. kisutch, O. masou, O. mykiss	General	Genetics, Methods	NA	Evolution,	NA
33	NA	Mountain_west	NA	Field/ RemoteSensing, Lab/ Experimental	O. clarkii	Evolution	Temperature_ FW	Genetics_Adaptation	Environment,	Evolution
34	NA	NA	NA	Theoretical/ Opinion	General	Evolution	NA	Productivity		Demography
35	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. keta	Marine	Climate_indices, Density_Food, Prey	Growth	Species_interactions, Environment,	Physiology
36	1	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. mykiss	Juvenile	Density_Food, Temperature_ FW	Behaviour, Growth, Habitat_Distribution	Species_interactions, Environment,	Dispersal, Physiology
37	10plus	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. tshawytscha	Juvenile	Habitat	Life_history, Productivity	Environment,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
38	NA	NA	NA	Model, Review/ MetaAnalysis	General	Marine	Ecosystem	Phenology, Productivity	Species_interactions,	Demography
39	1	NA	NA	Lab/ Experimental	S. salar	Juvenile	Temperature_ FW	Physiology_Condition	Environment,	Physiology
40	NA	NA	NA	Model	Salmonid_ general	Population	Management, Temperature_ FW	Population_resilience, Productivity	Environment, , Management	Demography
41	NA	Australia_New Zealand	NA	Model	General	Egg, Juvenile, Spawning	Habitat, Management, Restoration	NA	Environment, , Management	NA
42	2to5	British_Colum bia	British_Columb ia_Fraser	Lab/ Experimental	O. nerka	Evolution, Outmigration, Upmigration	Temperature_ FW	Physiology_Condition	Environment,	Physiology
43	1	British_Colum bia	British_Columb ia_Fraser	Lab/ Experimental	O. nerka	Upmigration	Temperature_ FW	Genetics_Adaptation, Physiology_Condition	Environment,	Evolution, Physiology
44	1	British_Colum bia	NA	Lab/ Experimental	S. salar	Evolution, Juvenile, Upmigration	Dissolved_oxyg en, Temperature_ FW	Physiology_Condition	Environment,	Physiology
45	1	British_Colum bia	British_Columb ia_not_Fraser	Lab/ Experimental	O. kisutch, O. mykiss	Juvenile	Temperature_ FW	Physiology_Condition	Environment,	Physiology
46	1	British_Colum bia	British_Columb ia_not_Fraser	Lab/ Experimental	S. salar	Juvenile	Dissolved_oxyg en, Temperature_ FW	Physiology_Condition	Environment,	Physiology
47	10plus	California, Northwest	California_CV, California_N, Northwest_Co astal, Northwest_Pu get_Sound	Field/ RemoteSensing	O. tshawytscha	Outmigration	Density_Food, Flow, Habitat	Behaviour, Habitat_Distribution, Phenology	Species_interactions, Environment,	Dispersal, Demography
48	2to5	South_Americ a	NA	Lab/ Experimental	O. kisutch	Spawning	Genetics	Genetics_Adaptation	Evolution,	Evolution
49	6to10	British_Colum bia	British_Columb ia_not_Fraser	Field/ RemoteSensing	O. kisutch, O. tshawytscha	General	Flow, Genetics	Behaviour	Evolution, Environment,	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
50	2to5	Europe	NA	Lab/ Experimental	S. trutta	Juvenile, Outmigration, Upmigration	Density_Food	Life_history, Phenology	Species_interactions,	Demography
51	1	Europe	NA	Lab/ Experimental	S. trutta	Juvenile	Density_Food, Temperature_ FW	Phenology	Species_interactions, Environment,	Demography
52	2to5	Europe	NA	Lab/ Experimental	S. trutta	Juvenile, Outmigration	Density_Food, Genetics	Physiology_Condition	Species_interactions, Evolution*,	Physiology
53	NA	California, Northwest	California_N, Northwest_Co astal	Lab/ Experimental	O. mykiss	Evolution	Genetics	Genetics_Adaptation, Life_history	Evolution,	Demography, Evolution
54	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Outmigration, Upmigration	Flow, Temperature_ FW	Genetics_Adaptation	Environment,	Evolution*
55	1	Europe	NA	Lab/ Experimental	S. trutta	Juvenile	Density_Food, Temperature_ FW	Growth, Physiology_Condition	Species_interactions, Environment,	Physiology
56	NA	California, Northwest	California_N, Northwest_Col umbia	Field/ RemoteSensing	S. confluentus	Juvenile	Temperature_ FW	Growth	Environment,	Physiology
57	NA	Alaska	Alaska_W	Model	O. nerka	Spawning, Upmigration	Environment, Predators	Habitat_Distribution, Mortality	Species_interactions, Environment,	Dispersal, Demography
58	2to5	Alaska	Alaska_W	Field/ RemoteSensing, Lab/ Experimental	O. kisutch, O. nerka	Juvenile, Spawning	Density_Food, Prey, Temperature_ FW	Diet, Growth	Species_interactions, Environment,	Species_interactio ns, Physiology
59	NA	Europe	NA	Model	S. salar	Juvenile	Density_Food, Prey	Growth, Physiology_Condition	Species_interactions,	Physiology
60	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Juvenile, Marine	NA	Growth, Mortality, Phenology		Demography, Physiology
61	10plus	California	California_S	Field/ RemoteSensing, Model	O. mykiss	Outmigration	Flow, Habitat, Management	Growth, Phenology	Environment, , Management	Demography, Physiology
62	6to10	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. tshawytscha	Egg, Juvenile	Climate_indice s, Flow	Mortality, Productivity	Environment,	Demography
63	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile	Temperature_ FW	Physiology_Condition	Environment,	Physiology
64	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile	Genetics	Performance, Physiology_Condition	Evolution,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
65	10plus	Largescale	NA	Model	O. mykiss	Marine	Density_Food, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
66	6to10	Largescale	NA	Field/ RemoteSensing	O. mykiss	Marine	Prey	Diet	Species_interactions,	Species_interactions
67	2to5	British_Columbia	British_Columbia_not_Fraser	Field/ RemoteSensing	O. nerka	Upmigration	Flow, Temperature_FW	Mortality, Phenology	Environment,	Demography
68	NA	Largescale	NA	Theoretical/ Opinion	Other_species	Marine	Ecosystem	NA	Species_interactions,	NA
69	NA	NA	NA	Review/ MetaAnalysis	General	Evolution	Fisheries, Genetics	Genetics_Adaptation	Evolution, , Management	Evolution
70	2to5	British_Columbia, Europe	British_Columbia_not_Fraser	Field/ RemoteSensing, Lab/ Experimental	S. salar	Juvenile	Density_Food, Habitat	Habitat_Distribution, Physiology_Condition	Species_interactions, Environment,	Dispersal, Physiology
71	2to5	Europe	NA	Field/ RemoteSensing	S. salar	General	Management	Mortality, Physiology_Condition	, Management	Demography, Physiology
72	6to10	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	S. confluentus	Egg, Juvenile, Spawning	Temperature_FW	Phenology	Environment,	Demography
73	10plus	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. tshawytscha	Spawning	Management, Temperature_FW	Genetics_Adaptation	Environment, , Management	Evolution
74	10plus	Largescale	NA	Model	O. gorbuscha	Marine	Ecosystem, Environment, Prey	Growth	Species_interactions, Environment,	Physiology
75	NA	Europe	NA	Model, Projections/ salmon	S. salar	Population, Upmigration	Fisheries, Flow, Temperature_FW	Genetics_Adaptation, Life_history, Productivity	Environment, , Management	Demography, Evolution
76	10plus	Europe	NA	Field/ RemoteSensing	S. trutta	Evolution	Density_Food, Habitat, Temperature_FW	Productivity	Species_interactions, Environment,	Demography
77	2to5	East_North_America	NA	Field/ RemoteSensing	S. salar	Spawning	Flow	Behaviour, Mortality	Environment,	Dispersal, Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
78	2to5	East_North_America	NA	Field/RemoteSensing	S. salar	Upmigration	Habitat, Management, Temperature_FW	Behaviour, Mortality	Environment, , Management	Dispersal, Demography
79	NA	California	California_N	Model, Projections/ecosystem	Other_species	General	Environment, Flow, Habitat, Predators	NA	Species_interactions, Environment,	NA
80	2to5	Europe	NA	Field/RemoteSensing, Model	S. trutta	Population	Flow, Habitat, Temperature_FW	Growth, Habitat_Distribution, Maturation, Productivity	Environment,	Dispersal, Demography, Physiology
81	10plus	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. gorbuscha, O. mykiss	Juvenile, Outmigration	Density_Food, Environment, Flow, Management, Temperature_FW	Growth, Life_history, Phenology	Species_interactions, Environment, , Management	Demography, Physiology
82	1	Europe	NA	Lab/Experimental	O. mykiss	Juvenile, Upmigration	Disease	Physiology_Condition	Species_interactions,	Physiology
83	1	Europe	NA	Lab/Experimental	O. mykiss	Juvenile, Upmigration	Disease	Physiology_Condition	Species_interactions,	Physiology
84	1	Europe	NA	Lab/Experimental	O. mykiss	Juvenile	Disease	Immune, Mortality	Species_interactions,	Demography, Physiology
85	1	Europe	NA	Lab/Experimental	O. mykiss	Juvenile, Upmigration	Disease	Physiology_Condition	Species_interactions,	Physiology
86	NA	Mountain_west	NA	Model	Other_fish	Freshwater_habitat	Management, Methods, Restoration	NA	, Management	NA
87	2to5	Europe	NA	Field/RemoteSensing	S. trutta	Spawning, Upmigration	Flow, Management	Behaviour, Phenology	Environment, , Management	Dispersal, Demography
88	NA	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	General	Spawning	Habitat, Restoration	NA	Environment, , Management	NA
89	NA	Europe	NA	Review/MetaAnalysis, Theoretical/Opinion	S. salar	Population	Flow, Management	Population_resilience	Environment, , Management	Demography
90	NA	NA	NA	Theoretical/Opinion	General	Marine	Climate_indices, Environment	NA	Environment,	NA



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
91	NA	California, Northwest	California_N, California_S, Northwest_Coastal	Review/ MetaAnalysis	General	Marine	Climate_indices, Ecosystem	NA	Species_interactions, Environment,	NA
92	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Juvenile	Density_Food, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
93	1	British_Columbia	British_Columbia_Fraser	Lab/ Experimental	O. gorbuscha, O. nerka, O. tshawytscha	Juvenile, Spawning	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
94	1	East_North_America	NA	Lab/ Experimental	O. mykiss	Juvenile	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
95	NA	California	California_S	Model, Projections/ ecosystem, Review/ MetaAnalysis	General	Marine	Ecosystem, Habitat, Temperature_marine	NA	Species_interactions, Environment,	NA
96	10plus	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. nerka	Spawning	Disease, Temperature_FW	Mortality	Species_interactions, Environment,	Demography
97	NA	California, Northwest	California_N, California_S, Northwest_Coastal	Model	General	Marine	Ecosystem, Methods	Habitat_Distribution	Species_interactions,	Dispersal
98	NA	Europe	NA	Model	S. salar	Juvenile	Flow, Management	Habitat_Distribution	Environment, , Management	Dispersal
99	2to5	Europe	NA	Field/ RemoteSensing	Other_fish, S. trutta	Juvenile	Flow, Temperature_FW	Productivity	Environment,	Demography
100	2to5	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing	O. nerka	Upmigration	Fisheries	Mortality	, Management	Demography
101	2to5	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing	O. nerka	Upmigration	Fisheries	Mortality	, Management	Demography
102	2to5	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing	O. nerka	Juvenile, Outmigration	Habitat	Life_history, Physiology_Condition	Environment,	Demography, Physiology
103	10plus	Northwest	Northwest_Coastal	Field/ RemoteSensing	O. clarkii	Juvenile	Habitat, Management, Temperature_FW	Habitat_Distribution	Environment, , Management	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
104	NA	Northwest	Northwest_Puget_Sound	Projections/salmon	O. tshawytscha	Population	Habitat, Restoration	NA	Environment, , Management	NA
105	NA	Asia_other	NA	Model, Projections/salmon	Other_fish	Population	Habitat, Management	Habitat_Distribution, Productivity	Environment, , Management	Dispersal, Demography
106	2to5	California	California_S	Field/RemoteSensing	General, Salmonid_general	Juvenile	Habitat, Temperature_FW	NA	Environment,	NA
107	2to5	California	California_CV	Lab/Experimental	O. mykiss	Juvenile, Outmigration	NA	Growth, Phenology		Demography, Physiology
108	NA	NA	NA	Review/MetaAnalysis	Salmonid_general	Marine	Management	NA	, Management	NA
109	NA	Largescale	NA	Review/MetaAnalysis	Salmonid_general	Marine	Management	NA	, Management	NA
110	NA	Largescale	NA	Review/MetaAnalysis	Salmonid_general	Marine	Climate_indices, Ecosystem, Environment	Mortality, Productivity	Species_interactions, Environment,	Demography
111	NA	NA	NA	Model	Salmonid_general	Juvenile	Density_Food, Flow, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
112	10plus	Europe	NA	Field/RemoteSensing	S. salar	Marine	Ecosystem, Temperature_marine	Growth, Mortality, Productivity	Species_interactions, Environment,	Demography, Physiology
113	1	East_North_America	NA	Field/RemoteSensing, Model	S. salar	Juvenile	Habitat, Methods, Temperature_FW	NA	Environment,	NA
114	2to5	Northwest	Northwest_Columbia	Lab/Experimental	O. tshawytscha	Outmigration	NA	Growth, Life_history, Phenology		Demography, Physiology
115	1	California	California_S	Field/RemoteSensing	Other_species	Marine	Acidity	NA	Environment,	NA
116	1	Antarctica, California	California_S	Field/RemoteSensing, Lab/Experimental	Other_species	Marine	Acidity	NA	Environment,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
117	NA	Northwest	Northwest_Puget_Sound	Model, Projections/ecosystem, Projections/physical	Other_species	Marine	Acidity, Ecosystem	Physiology_Condition	Species_interactions, Environment,	Physiology
118	2to5	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	Other_species	Marine	Acidity, Ecosystem	NA	Species_interactions, Environment,	NA
119	NA	Northwest	Northwest_Columbia	Model	O. kisutch	Juvenile	Flow, Management	Mortality, Productivity	Environment, , Management	Demography
120	NA	Northwest	Northwest_Coastal	Model	O. keta	Population	Flow, Habitat, Temperature_FW	Life_history, Productivity	Environment,	Demography
121	NA	Northwest	Northwest_Coastal	Model	O. keta, O. kisutch, O. mykiss, O. tshawytscha	Freshwater_habitat	Habitat, Restoration	Productivity	Environment, , Management	Demography
122	NA	NA	NA	Review/MetaAnalysis	Salmonid_general	Spawning	Habitat	Behaviour	Environment,	Dispersal
123	NA	Northwest	Northwest_Columbia	Model	General	Freshwater_habitat, Juvenile	Habitat, Restoration	Habitat_Distribution	Environment, , Management	Dispersal
124	NA	Northwest	NA	Model, Projections/salmon	Salmonid_general	Egg, Freshwater_habitat, Juvenile, Outmigration, Upmigration	Flow, Restoration, Temperature_FW	NA	Environment, , Management	NA
125	NA	Northwest	Northwest_Puget_Sound	Field/RemoteSensing, Model	O. tshawytscha	Egg	Temperature_FW	Phenology, Physiology_Condition	Environment,	Demography, Physiology
126	NA	Northwest	Northwest_Columbia	Model	O. mykiss, O. tshawytscha	Juvenile	Density_Food, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
127	NA	California, Northwest	California_Northwest_Coastal, Northwest_Columbia	Model, Projections/salmon	O. mykiss, O. tshawytscha	Juvenile, Spawning	Density_Food, Temperature_FW	Growth, Life_history	Species_interactions, Environment,	Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
128	NA	NA	NA	Theoretical/ Opinion	General	Evolution	Genetics, Management	Productivity	Evolution, , Management	Demography
129	10plus	Alaska	Alaska_SE	Field/ RemoteSensing	O. gorbuscha, O. kisutch, O. nerka, S. malma	Juvenile, Outmigration, Upmigration	Predators, Temperature_ FW	Mortality, Phenology	Species_interactions, Environment,	Demography
130	NA	NA	NA	Theoretical/ Opinion	General	Population	NA	Genetics_Adaptation		Evolution
131	6to10	California	California_S	Field/ RemoteSensing	O. mykiss	Juvenile	Temperature_ FW	Growth	Environment,	Physiology
132	NA	Northwest	Northwest_Columbia	Field/ RemoteSensing, Model	O. tshawytscha	Freshwater_habitat, Spawning	Flow, Habitat, Management	NA	Environment, , Management	NA
133	1	Northwest	Northwest_Columbia	Lab/ Experimental	O. tshawytscha	Juvenile	Temperature_ FW	Behaviour, Mortality	Environment,	Dispersal, Demography
134	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	Salmonid_general	Juvenile	Habitat	Population_resilience	Environment,	Demography
135	NA	Northwest	Northwest_Columbia	Model	Salmonid_general	Juvenile	Habitat, Management, Methods	Population_resilience, Productivity	Environment, , Management	Demography
136	NA	NA	NA	Review/ MetaAnalysis	General	Juvenile	Density_Food	NA	Species_interactions,	NA
137	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Spawning, Upmigration	Disease, Temperature_ FW	Mortality	Species_interactions, Environment,	Demography
138	6to10	Europe	NA	Lab/ Experimental	S. salar, S. trutta	Upmigration	Flow	Behaviour, Physiology_Condition	Environment,	Dispersal, Physiology
139	NA	Northwest	Northwest_Columbia	Model	S. confluentus	Spawning, Upmigration	Habitat, Temperature_ FW	Behaviour, Performance, Physiology_Condition	Environment,	Dispersal, Physiology
140	NA	Northwest	Northwest_Columbia	Model	O. mykiss	Juvenile, Outmigration	Density_Food, Temperature_ FW	Life_history, Population_resilience	Species_interactions, Environment,	Demography
141	10plus	Northwest	Northwest_Columbia	Model	S. confluentus	Juvenile	Flow, Management, Temperature_ FW	Habitat_Distribution, Population_resilience	Environment, , Management	Dispersal, Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
142	10plus	Alaska	Alaska_SE	Field/ RemoteSensing	O. nerka	Juvenile	Disease, Temperature_ FW	Immune	Species_interactions, Environment,	Physiology
143	10plus	Alaska	Alaska_W	Field/ RemoteSensing	O. nerka	Spawning	NA	Behaviour, Phenology		Dispersal, Demography
144	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. mykiss	Juvenile, Spawning	Management	Behaviour, Carryover, Performance	, Management	Dispersal, Demography, Physiology
145	2to5	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. mykiss	Juvenile, Outmigration	Habitat	Life_history	Environment,	Demography
146	10plus	Alaska	Alaska_SE	Field/ RemoteSensing	O. tshawytscha	Juvenile, Marine	Density_Food, Flow, Temperature_ FW	Carryover, Growth, Mortality	Species_interactions, Environment,	Demography, Physiology
147	1	Europe	NA	Lab/ Experimental	S. salar	Outmigration	Temperature_ FW	Physiology_Condition	Environment,	Physiology
148	1	Europe	NA	Field/ RemoteSensing	S. trutta	Juvenile	Habitat	Genetics_Adaptation, Habitat_Distribution	Environment,	Dispersal, Evolution
149	1	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing, Lab/ Experimental	O. gorbuscha, O. keta, O. mykiss, O. nerka	Upmigration	Flow, Management	Behaviour, Mortality, Physiology_Condition	Environment, , Management	Dispersal, Demography, Physiology
150	1	Europe	NA	Lab/ Experimental	General	Juvenile	Disease, Temperature_ FW	NA	Species_interactions, Environment,	NA
151	10plus	Alaska	Alaska_S, Alaska_SE, Alaska_W	Field/ RemoteSensing	Other_species	Marine	Climate_indices, Ecosystem, Environment	Mortality	Species_interactions, Environment,	Demography
152	10plus	Northwest	Northwest_Coastal	Field/ RemoteSensing	O. kisutch, O. tshawytscha	Marine	Ecosystem, Habitat, Prey	Behaviour, Habitat_Distribution	Species_interactions, Environment,	Dispersal
153	1	NA	NA	Lab/ Experimental	Other_fish	Marine	Acidity	Performance	Environment,	Physiology
154	NA	NA	NA	Review/ MetaAnalysis	General	Marine	Acidity, Management	NA	Environment, , Management	NA
155	NA	East_North_America	NA	Review/ MetaAnalysis	S. salar	General	Density_Food, Habitat, Temperature_ FW	Habitat_Distribution	Species_interactions, Environment,	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
156	NA	Europe	NA	Model, Projections/ ecosystem	General	Juvenile	Ecosystem, Environment, Flow, Temperature_ FW	NA	Species_interactions, Environment,	NA
157	NA	NA	NA	Theoretical/ Opinion	Salmonid_ general	Juvenile	Flow, Habitat, Management	Habitat_Distribution, Population_resilience	Environment, , Management	Dispersal, Demography
158	2to5	Europe	NA	Field/ RemoteSensing	S. salar	Outmigration	Flow, Habitat	Mortality, Phenology	Environment,	Demography
159	1	Northwest	Northwest_Coastal	Lab/ Experimental	O. tshawytscha	Juvenile, Upmigration	Disease	Immune, Physiology_Condition	Species_interactions,	Physiology
160	10plus	Europe	NA	Field/ RemoteSensing, Model	S. salar, S. trutta	Juvenile, Outmigration, Population	Flow, Management	Phenology	Environment, , Management	Demography
161	NA	NA	NA	Review/ MetaAnalysis	Salmonid_ general	Juvenile, Outmigration	Acidity, Environment	Physiology_Condition	Environment,	Physiology
162	10plus	California	California_N, California_S	Field/ RemoteSensing	Other_fish	Marine	Climate_indices, Ecosystem, Temperature_ marine	NA	Species_interactions, Environment,	NA
163	10plus	California, Largescale, Northwest	California_N, California_S, Northwest_Coastal	Field/ RemoteSensing	O. tshawytscha, Other_fish, Other_species	Marine	Climate_indices, Density_Food, Ecosystem, Environment, Predators	Growth, Productivity	Species_interactions, Environment,	Demography, Physiology
164	6to10	Australia_New Zealand	NA	Field/ RemoteSensing	O. mykiss	Juvenile	Dissolved_oxygen, Temperature_ FW	Growth	Environment,	Physiology
165	1	Mountain_west	NA	Field/ RemoteSensing, Lab/ Experimental	O. mykiss	Juvenile	Temperature_ FW	Physiology_Condition	Environment,	Physiology
166	1	Northwest	Northwest_Puget_Sound	Lab/ Experimental	O. kisutch	Upmigration	NA	Physiology_Condition		Physiology
167	NA	Largescale	NA	Model, Projections/ ecosystem	General	Marine	Ecosystem, Temperature_ FW	Productivity	Species_interactions, Environment,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
168	1	East_North_America	NA	Lab/Experimental	O. mykiss	Juvenile	Contaminants, Temperature_FW	Physiology_Condition	Environment,	Physiology
169	1	Europe	NA	Lab/Experimental	S. salar	Egg	Dissolved_oxygen	Morphology	Environment,	Physiology
170	10plus	East_North_America	NA	Field/RemoteSensing	S. fontinalis	Egg, Juvenile	Flow	Productivity	Environment,	Demography
171	1	East_North_America	NA	Field/RemoteSensing	S. salar	Marine	Methods	Mortality		Demography
172	1	East_North_America	NA	Field/RemoteSensing	S. salar	Marine, Spawning	Prey	Habitat_Distribution, Life_history	Species_interactions,	Dispersal, Demography
173	1	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. clarkii	Freshwater_habitat, Spawning	Flow, Habitat	Habitat_Distribution	Environment,	Dispersal
174	NA	Largescale	NA	Review/MetaAnalysis	General	Juvenile, Marine	Ecosystem, Fisheries	NA	Species_interactions, , Management	NA
175	6to10	Northwest	Northwest_Puget_Sound	Lab/Experimental	O. kisutch	Spawning	Genetics, Management	Genetics_Adaptation	Evolution, , Management	Evolution
176	10plus	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	General	Marine	Density_Food, Ecosystem, Environment	NA	Species_interactions, Environment,	NA
177	NA	Largescale	NA	Review/MetaAnalysis	General	Marine	Ecosystem, Management, Methods	NA	Species_interactions, , Management	NA
178	NA	Europe	NA	Review/MetaAnalysis	S. salar	Freshwater_habitat	Habitat, Management, Restoration	Population_resilience	Environment, , Management	Demography
179	1	South_America	NA	Lab/Experimental	S. salar	Juvenile	Temperature_FW	Carryover, Growth, Mortality, Physiology_Condition	Environment,	Demography, Physiology
180	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Juvenile, Upmigration	Management, Temperature_FW	Behaviour, Carryover	Environment, , Management	Dispersal, Demography
181	2to5	California	California_CV	Field/RemoteSensing	O. kisutch	Juvenile	Methods	NA		NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
182	1	California	California_S	Field/ RemoteSensing	O. mykiss	Juvenile, Outmigration	Dissolved_oxygen, Environment, Temperature_ FW	Behaviour, Performance	Environment,	Dispersal, Physiology
183	10plus	California	California_S	Field/ RemoteSensing	O. mykiss	Outmigration	Environment, Flow	Behaviour, Phenology	Environment,	Dispersal, Demography
184	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Population, Spawning	Fisheries	Behaviour, Life_history, Performance	, Management	Dispersal, Demography, Physiology
185	NA	Europe	NA	Model, Projections/ salmon	S. trutta	Juvenile	Disease, Environment, Temperature_ FW	Growth, Physiology_Condition	Species_interactions, Environment,	Physiology
186	10plus	British_Columbia	British_Columbia_not_Fraser	Field/ RemoteSensing	O. nerka, Other_species	Marine	Density_Food, Ecosystem, Environment	Mortality, Productivity	Species_interactions, Environment,	Demography
187	NA	NA	NA	Model, Theoretical/ Opinion	O. kisutch	Population	Fisheries	Population_resilience, Productivity	, Management	Demography
188	10plus	Alaska	Alaska_W	Model, Theoretical/ Opinion	O. nerka	General	Management	Productivity	, Management	Demography
189	NA	California	California_S	Model, Projections/ salmon	O. mykiss	Upmigration	Restoration	NA	, Management	NA
190	NA	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Freshwater_habitat, Juvenile, Spawning	Flow, Habitat, Temperature_ FW	NA	Environment,	NA
191	1	California	California_S	Lab/ Experimental	O. mykiss	Juvenile	Temperature_ FW	Growth	Environment,	Physiology
192	NA	NA	NA	Review/ MetaAnalysis	General	General	Acidity, Disease, Dissolved_oxygen, Environment, Temperature_ FW	Immune	Species_interactions, Environment,	Physiology



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
193	1	Northwest	Northwest_Columbia	Lab/Experimental	Other_species	Juvenile	Invasives	NA	Species_interactions,	NA
194	1	Alaska	Alaska_W	Field/RemoteSensing	O. tshawytscha	Upmigration	Temperature_FW	Physiology_Condition	Environment,	Physiology
195	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing, Projections/salmon	O. tshawytscha	Spawning, Upmigration	Genetics, Temperature_FW	Mortality	Evolution*, Environment,	Demography
196	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Spawning	Temperature_FW	Mortality	Environment,	Demography
197	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Evolution, Marine	Fisheries, Genetics	Life_history, Maturation	Evolution, , Management	Demography, Physiology
198	2to5	Mountain_west	NA	Field/RemoteSensing	O. mykiss, S. trutta	Upmigration	Fisheries, Temperature_FW	Mortality	Environment, , Management	Demography
199	10plus	Northwest	Northwest_Columbia	Model	O. tshawytscha	Marine, Upmigration	NA	Behaviour, Phenology		Dispersal, Demography
200	6to10	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. gorbuscha	Spawning, Upmigration	Disease	NA	Species_interactions,	NA
201	NA	British_Columbia	British_Columbia_Fraser	Review/MetaAnalysis	General	Freshwater_habitat	Habitat, Management	NA	Environment, , Management	NA
202	1	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Spawning, Upmigration	Disease	Physiology_Condition	Species_interactions,	Physiology
203	10plus	California	California_N, Northwest_Coastal	Projections/physical	General	Marine	Acidity	NA	Environment,	NA
204	2to5	California	California_CV	Field/RemoteSensing	O. tshawytscha	Outmigration	Density_Food, Methods, Predators	Mortality	Species_interactions,	Demography
205	10plus	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Egg, Juvenile, Spawning	Flow, Temperature_FW	Carryover, Morphology	Environment,	Demography, Physiology
206	1	East_North_America	NA	Lab/Experimental	S. salar	Juvenile	Temperature_FW	Behaviour, Physiology_Condition	Environment,	Dispersal, Physiology
207	2to5	Alaska	Alaska_W	Field/RemoteSensing	O. nerka, O. tshawytscha	Juvenile	Habitat	Productivity	Environment,	Demography
208	2to5	California	California_N	Field/RemoteSensing	O. mykiss	Juvenile	Temperature_FW	Habitat_Distribution	Environment,	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
209	2to5	California	California_N	Field/ RemoteSensing	O. mykiss	Juvenile	Density_Food, Habitat, Temperature_ FW	Diet, Habitat_Distribution	Species_interactions, Environment,	Species_interactions, Dispersal
210	1	Europe	NA	Lab/ Experimental	O. mykiss	Juvenile	Contaminants, Flow, Temperature_ FW	Physiology_Condition	Environment,	Physiology
211	10plus	Northwest	NA	Field/ RemoteSensing	O. mykiss	Marine	Climate_indice s, Density_Food, Prey	Diet	Species_interactions, Environment,	Species_interactions
212	NA	California, Northwest	California_N, Northwest_Co astal	Review/ MetaAnalysis	Other_fish	Marine	Density_Food, Ecosystem, Predators	Habitat_Distribution	Species_interactions,	Dispersal
213	10plus	Northwest	Northwest_Co astal	Field/ RemoteSensing	Other_fish	Marine	Density_Food, Temperature_ marine	NA	Species_interactions, Environment,	NA
214	10plus	California, Northwest	California_N, California_S, Northwest_Co astal	Field/ RemoteSensing, Model, Projections/ physical	Other_fish	Marine	Environment, Temperature_ marine	NA	Environment,	NA
215	10plus	California	California_CV, California_N	Field/ RemoteSensing, Model, Review/ MetaAnalysis	Other_fish	Juvenile, Marine, Outmigration, Upmigration	Contaminants, Ecosystem, Environment	Life_history	Species_interactions, Environment,	Demography
216	NA	California, Northwest	California_N, Northwest_Co astal, Northwest_Col umbia	Field/ RemoteSensing	General	Juvenile, Outmigration	Habitat, Restoration	NA	Environment, , Management	NA
217	2to5	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. tshawytscha	Marine	Flow, Temperature_ marine	Mortality	Environment,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
218	NA	Northwest	Northwest_Coastal	Model	General	Freshwater_habitat, Outmigration	Temperature_FW, Temperature_marine	NA	Environment,	NA
219	10plus	British_Columbia	British_Columbia_Fraser, British_Columbia_not_Fraser	Field/RemoteSensing	Salmonid_general	Spawning	Ecosystem, Habitat	NA	Species_interactions, Environment,	NA
220	NA	Australia_New Zealand	NA	Model	Other_fish, Other_species	Marine	Density_Food, Ecosystem, Fisheries	NA	Species_interactions, , Management	NA
221	10plus	Alaska	Alaska_W	Field/RemoteSensing	O. keta, O. tshawytscha	Population	NA	Maturation, Phenology, Productivity		Demography, Physiology
222	NA	East_North_America	NA	Review/MetaAnalysis	Salmonid_general	Juvenile	Habitat	Habitat_Distribution	Environment,	Dispersal
223	1	Europe	NA	Field/RemoteSensing	S. salar, S. trutta	Juvenile, Upmigration	Disease, Temperature_FW	Physiology_Condition	Species_interactions, Environment,	Physiology
224	2to5	California	California_CV	Field/RemoteSensing	O. tshawytscha	Outmigration	Flow, Management	Habitat_Distribution, Mortality	Environment, , Management	Dispersal, Demography
225	6to10	California	California_CV	Field/RemoteSensing	O. mykiss	Outmigration	Flow, Habitat, Management	Habitat_Distribution, Mortality	Environment, , Management	Dispersal, Demography
226	6to10	California	California_CV	Field/RemoteSensing	O. tshawytscha	Juvenile, Outmigration	Flow	Mortality	Environment,	Demography
227	NA	Europe	NA	Model	S. salar	Juvenile	Habitat, Methods	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
228	2to5	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. clarkii, O. kisutch	Juvenile	Density_Food	Behaviour, Growth, Mortality	Species_interactions,	Dispersal, Demography, Physiology
229	NA	Australia_New Zealand	NA	Model	General	Outmigration	Ecosystem, Environment, Management	NA	Species_interactions, Environment, , Management	NA
230	NA	NA	NA	Review/MetaAnalysis	General	Marine	Disease	NA	Species_interactions,	NA
231	NA	NA	NA	Review/MetaAnalysis	O. tshawytscha	Upmigration	Disease	Mortality	Species_interactions,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
232	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. tshawytscha	Marine	NA	Behaviour, Physiology_Condition		Dispersal, Physiology
233	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. tshawytscha	Marine	Temperature_marine	Habitat_Distribution	Environment,	Dispersal
234	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Marine	Climate_indices, Density_Food, Environment, Methods, Prey, Temperature_marine	Mortality, Productivity	Species_interactions, Environment,	Demography
235	NA	Europe	NA	Model	Other_fish	Juvenile, Spawning	Flow, Management	Mortality	Environment, , Management	Demography
236	1	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Upmigration	Flow, Management	Mortality	Environment, , Management	Demography
237	1	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Upmigration	Flow, Management	Carryover, Mortality	Environment, , Management	Demography
238	1	British_Columbia	British_Columbia_Fraser	Lab/Experimental	O. nerka	Egg, Juvenile	Temperature_FW	Carryover, Performance	Environment,	Demography, Physiology
239	1	British_Columbia	British_Columbia_Fraser	Lab/Experimental	O. nerka	Egg, Juvenile	Temperature_FW	Carryover, Performance	Environment,	Demography, Physiology
240	NA	California, Northwest	California_N, California_S, Northwest_Coastal	Review/MetaAnalysis	Other_fish, Other_species	Marine	Acidity	Mortality	Environment,	Demography
241	NA	Northwest	Northwest_Puget_Sound	Model	General	Marine	Acidity, Density_Food, Ecosystem	NA	Species_interactions, Environment,	NA
242	NA	Northwest	Northwest_Puget_Sound	Model	O. keta, O. mykiss, O. tshawytscha, S. confluentus	General	Ecosystem, Management	Mortality	Species_interactions, , Management	Demography
243	6to10	Northwest	Northwest_Coastal	Field/RemoteSensing	O. kisutch	Spawning	Flow, Temperature_FW	Habitat_Distribution, Phenology	Environment,	Dispersal, Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
244	6to10	East_North_America	NA	Field/RemoteSensing, Model	S. fontinalis	Juvenile	Habitat, Temperature_FW	Habitat_Distribution	Environment,	Dispersal
245	NA	East_North_America	NA	Model	S. salar	Marine	Environment	Behaviour, Habitat_Distribution	Environment,	Dispersal
246	NA	British_Columbia	British_Columbia_Fraser	Model, Review/MetaAnalysis	O. nerka, O. tshawytscha, S. salar	Marine	Habitat	Behaviour, Habitat_Distribution	Environment,	Dispersal
247	2to5	Alaska	Alaska_W	Field/RemoteSensing	O. nerka	Spawning	Habitat	Habitat_Distribution, Morphology	Environment,	Dispersal, Physiology
248	NA	Mountain_west	NA	Field/RemoteSensing	Other_fish	Population	Genetics, Management	Genetics_Adaptation, Habitat_Distribution	Evolution, , Management	Dispersal, Evolution
249	2to5	Alaska	Alaska_S	Field/RemoteSensing	O. kisutch	Juvenile	Density_Food, Habitat, Prey, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
250	2to5	Alaska	Alaska_S	Field/RemoteSensing	O. kisutch	Egg	Habitat, Temperature_FW	Growth, Phenology	Environment,	Demography, Physiology
251	10plus	South_America	NA	Model	Other_fish	Marine	Density_Food, Ecosystem	Growth	Species_interactions,	Physiology
252	10plus	Alaska	Alaska_W	Field/RemoteSensing	O. nerka	Upmigration	Temperature_FW	Phenology	Environment,	Demography
253	2to5	Alaska	Alaska_W	Field/RemoteSensing	O. nerka	Upmigration	Temperature_FW	Physiology_Condition	Environment,	Physiology
254	6to10	Alaska	Alaska_W	Field/RemoteSensing	O. nerka	Marine, Spawning	Temperature_marine	Mortality, Performance	Environment,	Demography, Physiology
255	10plus	East_North_America	NA	Model	O. mykiss, S. fontinalis, S. trutta	Juvenile	Management, Methods, Temperature_FW	Population_resilience	Environment, , Management	Demography
256	10plus	East_North_America	NA	Model, Projections/salmon	O. mykiss, S. fontinalis, S. trutta	Juvenile	Management, Temperature_FW	Population_resilience	Environment, , Management	Demography
257	10plus	Europe	NA	Field/RemoteSensing, Model	S. salar	Marine	Methods, Temperature_marine	NA	Environment,	NA
258	NA	NA	NA	Review/MetaAnalysis	Salmonid_general	Evolution	Genetics	Genetics_Adaptation, Population_resilience	Evolution,	Demography, Evolution

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
259	NA	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. tshawytscha	Freshwater_habitat, Juvenile	Flow, Habitat, Management, Temperature_FW	Habitat_Distribution	Environment, , Management	Dispersal
260	1	East_North_America	NA	Lab/Experimental	O. mykiss	Juvenile	Dissolved_oxygen	Performance, Physiology_Condition	Environment,	Physiology
261	1	East_North_America	NA	Lab/Experimental	O. mykiss	Juvenile	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
262	10plus	Alaska	Alaska_W	Field/RemoteSensing	Salmonid_general	Population	Fisheries, Habitat	Habitat_Distribution	Environment, , Management	Dispersal
263	2to5	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. nerka	Juvenile, Outmigration	Habitat	Phenology, Population_resilience	Environment,	Demography
264	1	Europe	NA	Lab/Experimental	Other_species	Marine	Acidity, Disease, Ecosystem	NA	Species_interactions, Environment,	NA
265	NA	NA	NA	Review/MetaAnalysis	General	Freshwater_habitat, Marine	Ecosystem, Environment, Flow, Temperature_FW	Life_history	Species_interactions, Environment,	Demography
266	1	British_Columbia	British_Columbia_not_Fraser	Lab/Experimental	O. kisutch	Juvenile	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
267	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss, O. tshawytscha	Upmigration	Habitat, Temperature_FW	Behaviour	Environment,	Dispersal
268	2to5	Largescale	NA	Review/MetaAnalysis	General, Other_species	Marine	Ecosystem, Environment, Temperature_marine	Habitat_Distribution, Productivity	Species_interactions, Environment,	Dispersal, Demography
269	6to10	East_North_America	NA	Field/RemoteSensing	Other_fish	Population	Environment	Life_history	Environment,	Demography
270	2to5	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. keta, O. tshawytscha	Juvenile, Outmigration	Density_Food, Habitat	Habitat_Distribution	Species_interactions, Environment,	Dispersal
271	2to5	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. tshawytscha	Outmigration, Population	Density_Food, Habitat, Temperature_FW	Habitat_Distribution, Life_history	Species_interactions, Environment,	Dispersal, Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
272	NA	NA	NA	Model	General	Evolution	Ecosystem, Environment	Genetics_Adaptation	Species_interactions, Environment,	Evolution*
273	1	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing, Lab/Experimental	O. kisutch	Upmigration	Disease, Management	Mortality, Physiology_Condition	Species_interactions, , Management	Demography, Physiology
274	1	East_North_America	NA	Field/RemoteSensing	S. salar	Upmigration	Disease, Genetics, Temperature_FW	Immune, Performance, Physiology_Condition	Species_interactions, Evolution*, Environment,	Physiology
275	10plus	East_North_America	NA	Field/RemoteSensing	S. salar	Marine, Spawning	Density_Food	Carryover, Mortality	Species_interactions,	Demography
276	10plus	Largescale	NA	Field/RemoteSensing	O. tshawytscha	Marine	Fisheries, Predators	Mortality	Species_interactions, , Management	Demography
277	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Juvenile, Marine, Outmigration	Climate_indices, Flow, Management, Temperature_FW, Temperature_marine	Carryover, Mortality	Environment, , Management	Demography
278	NA	East_North_America	NA	Field/RemoteSensing	Other_fish	Juvenile	Habitat	Growth	Environment,	Physiology
279	1	California	California_S	Lab/Experimental	Other_fish	Egg, Marine	Acidity	Physiology_Condition	Environment,	Physiology
280	6to10	California	California_N	Field/RemoteSensing	O. tshawytscha	Outmigration	Density_Food, Flow, Habitat, Prey	Carryover, Growth, Habitat_Distribution, Mortality	Species_interactions, Environment,	Dispersal, Demography, Physiology
281	1	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. mykiss	Juvenile, Marine, Outmigration	Contaminants, Disease	Mortality	Species_interactions, Environment,	Demography
282	1	Asia_other	NA	Lab/Experimental	O. mykiss	Juvenile	Acidity	Growth, Physiology_Condition	Environment,	Physiology
283	1	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Evolution	Temperature_FW	Genetics_Adaptation, Performance, Physiology_Condition	Environment,	Evolution, Physiology
284	1	Northwest	Northwest_Columbia	Lab/Experimental	O. mykiss	Evolution	Genetics, Temperature_FW	Genetics_Adaptation	Evolution, Environment,	Evolution

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
285	1	Australia_New Zealand	NA	Lab/ Experimental	O. mykiss	Juvenile	Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
286	1	British_Columbia	British_Columbia_Fraser	Lab/ Experimental	O. nerka	Egg	Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
287	NA	Alaska, British_Columbia, Largescale, Northwest	NA	Field/ RemoteSensing, Model, Projections/ ecosystem	Other_fish, Salmonid_general	Marine	Climate_indices, Ecosystem, Temperature_marine	Habitat_Distribution, Productivity	Species_interactions, Environment,	Dispersal, Demography
288	NA	East_North_America	NA	Model, Projections/ ecosystem	Other_species	Marine	Acidity, Dissolved_oxygen, Ecosystem, Fisheries	NA	Species_interactions, Environment, , Management	NA
289	NA	Europe	NA	Review/ MetaAnalysis	Other_fish	Marine	Acidity, Ecosystem, Fisheries, Temperature_marine	NA	Species_interactions, Environment, , Management	NA
290	NA	Largescale	NA	Model, Projections/ ecosystem	Other_fish, Salmonid_general	Marine	Fisheries	NA	, Management	NA
291	1	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Juvenile	Habitat	Growth, Habitat_Distribution, Phenology	Environment,	Dispersal, Demography, Physiology
292	1	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Juvenile	Density_Food, Habitat, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
293	6to10	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Juvenile	Habitat	Growth, Habitat_Distribution, Phenology	Environment,	Dispersal, Demography, Physiology
294	10plus	British_Columbia	British_Columbia_not_Fraser	Field/ RemoteSensing	O. kisutch	Marine, Outmigration	Ecosystem, Management, Prey	Mortality	Species_interactions, , Management	Demography
295	NA	Largescale	NA	Review/ MetaAnalysis	Salmonid_general	Marine	Climate_indices, Temperature_marine	Behaviour, Habitat_Distribution, Life_history, Mortality	Environment,	Dispersal, Demography



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
296	2to5	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. tshawytscha	Marine, Outmigration	Density_Food, Ecosystem, Environment, Prey	Mortality, Phenology	Species_interactions, Environment,	Demography
297	10plus	Asia_other	NA	Field/RemoteSensing	O. masou	Population	Flow	Growth, Habitat_Distribution, Life_history, Mortality, Productivity	Environment,	Dispersal, Demography, Physiology
298	NA	East_North_America	NA	Field/RemoteSensing	Other_fish	Evolution	Genetics	Genetics_Adaptation, Population_resilience	Evolution,	Demography, Evolution
299	1	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Juvenile	Predators	Mortality	Species_interactions,	Demography
300	10plus	Mountain_west	NA	Field/RemoteSensing, Model, Projections/physical	O. clarkii, S. fontinalis	Juvenile	Temperature_FW	Growth, Physiology_Condition	Environment,	Physiology
301	1	Europe	NA	Lab/Experimental	S. salar	Juvenile	Management	Growth, Life_history, Maturation	, Management	Demography, Physiology
302	10plus	California	California_N, California_S	Field/RemoteSensing, Model	Other_species	Marine	Density_Food, Ecosystem, Environment	NA	Species_interactions, Environment,	NA
303	1	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Upmigration	Habitat, Temperature_FW	Habitat_Distribution	Environment,	Dispersal
304	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss, O. tshawytscha	Upmigration	Temperature_FW	Physiology_Condition	Environment,	Physiology
305	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Marine	Management	Mortality, Phenology	, Management	Demography
306	6to10	Northwest	Northwest_Coastal, Northwest_Puget_Sound	Field/RemoteSensing	O. tshawytscha	Marine	Climate_indices, Methods, Temperature_marine	Growth, Mortality	Environment,	Demography, Physiology
307	NA	Largescale	NA	Lab/Experimental	General	General	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
308	1	Northwest	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Upmigration	Flow	Performance, Physiology_Condition	Environment,	Physiology
309	1	British_Columbia	British_Columbia_Fraser	Lab/Experimental	O. gorbuscha	Spawning, Upmigration	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
310	1, 2to5	British_Columbia	British_Columbia_not_Fraser	Lab/Experimental	O. kisutch	Upmigration	Fisheries, Temperature_FW	Physiology_Condition	Environment, , Management	Physiology
311	NA	NA	NA	Review/MetaAnalysis	Other_fish	Juvenile	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
312	10plus	Europe	NA	Field/RemoteSensing	S. salar, S. trutta	Juvenile	Climate_indices, Temperature_FW	Population_resilience	Environment,	Demography
313	1	California	California_CV	Lab/Experimental	O. mykiss	Juvenile	Flow, Management	Physiology_Condition	Environment, , Management	Physiology
314	10plus	California	California_N	Field/RemoteSensing	O. kisutch	Marine, Spawning	Methods	Mortality		Demography
315	1	NA	NA	Lab/Experimental, Model	General	Juvenile, Upmigration	Contaminants, Flow, Methods	NA	Environment,	NA
316	1	Northwest	Northwest_Coastal	Lab/Experimental	O. mykiss	Juvenile	Temperature_FW	Life_history, Maturation	Environment,	Demography, Physiology
317	1	NA	NA	Lab/Experimental	Other_fish	Marine	Acidity	Physiology_Condition	Environment,	Physiology
318	10plus	Northwest	Northwest_Coastal, Northwest_Columbia	Field/RemoteSensing	O. mykiss	Upmigration	Genetics	Phenology	Evolution,	Demography
319	NA	NA	NA	Review/MetaAnalysis	General	Freshwater_habitat	Habitat	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
320	1	Largescale	NA	Lab/Experimental	Other_species	Marine	Acidity	NA	Environment,	NA
321	1	Largescale	NA	Theoretical/Opinion	Other_species	Marine	Acidity	NA	Environment,	NA
322	1	Europe	NA	Lab/Experimental	Other_species	Marine	Acidity	Performance, Physiology_Condition	Environment,	Physiology
323	NA	Largescale	NA	Model, Projections/ecosystem	Other_species	Marine	Acidity	NA	Environment,	NA
324	1	Largescale	NA	Projections/ecosystem	Other_species	Marine	Acidity	NA	Environment,	NA
325	1	East_North_America	NA	Lab/Experimental	Other_species	Marine	Acidity	NA	Environment,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
326	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing, Lab/Experimental	O. tshawytscha	Egg, Spawning	Temperature_FW	Habitat_Distribution	Environment,	Dispersal
327	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. tshawytscha	Spawning, Upmigration	Flow, Temperature_FW	Population_resilience, Productivity	Environment,	Demography
328	10plus	British_Columbia	British_Columbia_Fraser	Model	O. gorbuscha, O. nerka	Marine	Climate_indices, Density_Food, Disease, Ecosystem, Management, Temperature_marine	NA	Species_interactions, Environment, , Management	NA
329	10plus	Alaska, British_Columbia, Largescale	NA	Field/RemoteSensing	O. nerka	Marine	Density_Food, Temperature_marine	Productivity	Species_interactions, Environment,	Demography
330	NA	NA	NA	Review/MetaAnalysis	General	Evolution	Genetics	Genetics_Adaptation, Morphology	Evolution,	Evolution, Physiology
331	1	East_North_America	NA	Lab/Experimental	S. fontinalis	Egg	Genetics, Temperature_FW	Physiology_Condition	Evolution, Environment,	Physiology
332	1	East_North_America	NA	Lab/Experimental	O. mykiss	Egg, Juvenile, Upmigration	Flow	Behaviour, Performance	Environment,	Dispersal, Physiology
333	NA	NA	NA	Review/MetaAnalysis	Other_fish, Salmonid_general	Marine	Fisheries, Management	Mortality	, Management	Demography
334	NA	NA	NA	Review/MetaAnalysis	Salmonid_general	Upmigration	Management	Physiology_Condition	, Management	Physiology
335	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. clarkii, O. tshawytscha, S. confluentus	Juvenile	Climate_indices, Density_Food, Flow, Temperature_FW	Productivity	Species_interactions, Environment,	Demography
336	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Spawning, Upmigration	Habitat	Behaviour, Life_history	Environment,	Dispersal, Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
337	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Freshwater_habitat, Juvenile, Spawning	Restoration	Habitat_Distribution	, Management	Dispersal
338	6to10	California	California_CV	Field/RemoteSensing	O. tshawytscha	Outmigration	Temperature_FW	Life_history, Phenology	Environment,	Demography
339	2to5	East_North_America	NA	Field/RemoteSensing	S. salar	Juvenile	Flow, Habitat, Temperature_FW	Habitat_Distribution	Environment,	Dispersal
340	1	Europe	NA	Lab/Experimental	S. salar	Egg	Environment, Management	Growth, Physiology_Condition	Environment, , Management	Physiology
341	NA	British_Columbia, East_North_America	NA	Theoretical/Opinion	General	Marine	Acidity, Ecosystem, Environment, Fisheries	NA	Species_interactions, Environment, , Management	NA
342	2to5	Europe	NA	Lab/Experimental	S. salar	Egg	Dissolved_oxygen	Genetics_Adaptation, Mortality, Phenology	Environment,	Demography, Evolution
343	1	East_North_America	NA	Lab/Experimental	O. mykiss	Juvenile	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
344	1	Alaska	Alaska_SE, Alaska_W	Field/RemoteSensing	O. tshawytscha	Spawning, Upmigration	Methods	Physiology_Condition		Physiology
345	2to5	Alaska	Alaska_S	Field/RemoteSensing	O. tshawytscha	Marine	Predators	Behaviour, Mortality	Species_interactions,	Dispersal, Demography
346	1	Europe	NA	Field/RemoteSensing	Other_fish, S. salar	Marine	Fisheries, Management, Predators	Livelihood, Mortality	Species_interactions, , Management	Demography, Management
347	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. kisutch	Juvenile, Outmigration	Habitat	Growth, Life_history	Environment,	Demography, Physiology
348	1	South_America	NA	Lab/Experimental	O. mykiss	Evolution	Temperature_FW	Performance, Physiology_Condition, Population_resilience	Environment,	Demography, Physiology
349	1	South_America	NA	Lab/Experimental	O. mykiss	Evolution	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
350	1	South_America	NA	Lab/Experimental	O. mykiss	Egg	Genetics, Temperature_FW	Genetics_Adaptation, Mortality, Phenology	Evolution, Environment,	Demography, Evolution
351	1	Europe	NA	Lab/Experimental	Other_species	Marine	Disease, Temperature_marine	NA	Species_interactions, Environment,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
352	1	British_Columbia	British_Columbia_Fraser	Lab/Experimental	O. nerka	Upmigration	Temperature_FW	Behaviour, Mortality, Physiology_Condition	Environment,	Dispersal, Demography, Physiology
353	NA	NA	NA	Review/MetaAnalysis	General	Evolution, Juvenile, Marine, Upmigration	Genetics, Temperature_FW	Genetics_Adaptation, Growth, Maturation	Evolution, Environment,	Evolution, Physiology
354	NA	Northwest	Northwest_Columbia	Model	O. tshawytscha	Population	Environment, Flow, Temperature_FW, Temperature_marine	Life_history, Productivity	Environment,	Demography
355	NA	Northwest	Northwest_Columbia	Model, Projections/salmon, Review/MetaAnalysis	O. tshawytscha	Juvenile, Marine, Outmigration, Population, Spawning, Upmigration	Environment, Flow, Temperature_FW, Temperature_marine	Population_resilience, Productivity	Environment,	Demography
356	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Upmigration	Flow, Temperature_FW	Mortality, Phenology	Environment,	Demography
357	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Upmigration	Flow, Habitat, Management, Temperature_FW	Behaviour, Habitat_Distribution, Mortality	Environment, , Management	Dispersal, Demography
358	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. nerka	Upmigration	Flow, Temperature_FW	Phenology	Environment,	Demography
359	NA	Largescale	NA	Projections/salmon, Review/MetaAnalysis	O. kisutch, O. nerka, O. tshawytscha	Population	Acidity, Habitat, Temperature_FW, Temperature_marine	Population_resilience	Environment,	Demography
360	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. tshawytscha	Upmigration	Flow, Temperature_FW	Behaviour, Mortality	Environment,	Dispersal, Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
361	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	O. nerka	Upmigration	Flow, Management, Temperature_FW	Behaviour, Carryover, Mortality	Environment, , Management	Dispersal, Demography
362	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Juvenile	Density_Food, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
363	10plus	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing, Model	O. nerka	Upmigration	Fisheries, Flow, Management, Methods, Temperature_FW	Mortality	Environment, , Management	Demography
364	10plus	Alaska	Alaska_W	Field/RemoteSensing	O. tshawytscha	Juvenile, Marine, Population	Density_Food, Environment, Flow, Temperature_marine	Mortality, Productivity	Species_interactions, Environment,	Demography
365	10plus	Largescale	NA	Field/RemoteSensing, Model	General	Juvenile, Marine	Fisheries, Management	Productivity	, Management	Demography
366	10plus	Europe	NA	Field/RemoteSensing	S. salar	Evolution	Genetics	Genetics_Adaptation, Maturation	Evolution,	Evolution, Physiology
367	2to5	Europe	NA	Lab/Experimental	O. mykiss	Spawning	Genetics	Genetics_Adaptation, Morphology, Productivity	Evolution,	Demography, Evolution, Physiology
368	10plus	East_North_America, Europe	NA	Field/RemoteSensing	S. salar	Marine, Population	Climate_indices, Fisheries, Management	Habitat_Distribution, Mortality, Productivity	Environment, , Management	Dispersal, Demography
369	10plus	California	California_S	Review/MetaAnalysis	O. mykiss	Population	Management	Population_resilience, Productivity	, Management	Demography
370	10plus	Northwest	NA	Field/RemoteSensing	O. tshawytscha	Marine	Climate_indices, Density_Food, Ecosystem, Prey	Growth, Mortality	Species_interactions, Environment,	Demography, Physiology
371	1	East_North_America	NA	Lab/Experimental	O. tshawytscha	Egg, Juvenile, Upmigration	Contaminants	Carryover	Environment,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
372	NA	East_North_America	NA	Field/RemoteSensing	Other_fish	Population	Environment, Fisheries, Genetics, Temperature_FW, Temperature_marine	Genetics_Adaptation, Habitat_Distribution	Evolution, Environment, Management	Dispersal, Evolution
373	10plus	Northwest	Northwest_Coastal	Field/RemoteSensing	O. tshawytscha	Marine	Density_Food, Temperature_marine	Diet, Growth, Mortality	Species_interactions, Environment,	Species_interactions, Demography, Physiology
374	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Juvenile, Marine, Outmigration	Density_Food, Habitat	Diet, Growth	Species_interactions, Environment,	Species_interactions, Physiology
375	10plus	Northwest	Northwest_Coastal	Field/RemoteSensing	O. tshawytscha	Marine	Density_Food	Diet, Growth, Mortality, Physiology_Condition	Species_interactions,	Species_interactions, Demography, Physiology
376	10plus	Northwest	Northwest_Coastal	Field/RemoteSensing	O. kisutch, O. tshawytscha	Marine	Density_Food	Diet, Mortality	Species_interactions,	Species_interactions, Demography
377	NA	Largescale	NA	Review/MetaAnalysis	General	Marine	Disease	Immune	Species_interactions,	Physiology
378	2to5	Europe	NA	Field/RemoteSensing	S. salar	Juvenile	Habitat, Management	Behaviour, Habitat_Distribution	Environment, Management	Dispersal
379	6to10	East_North_America	NA	Field/RemoteSensing	S. salar	Juvenile	Density_Food, Flow, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
380	NA	NA	NA	Review/MetaAnalysis	General	Evolution	Habitat	Genetics_Adaptation	Environment,	Evolution
381	2to5	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. tshawytscha	Outmigration	Density_Food, Habitat	Growth	Species_interactions, Environment,	Physiology
382	2to5	California	California_CV	Field/RemoteSensing	O. tshawytscha	Juvenile, Outmigration	Density_Food, Habitat	Growth	Species_interactions, Environment,	Physiology
383	2to5	Northwest	Northwest_Puget_Sound	Field/RemoteSensing, Model, Projections/salmon	O. tshawytscha	Outmigration	Habitat, Prey, Temperature_FW	Growth, Physiology_Condition	Species_interactions, Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
384	2to5	Europe	NA	Field/ RemoteSensing	S. salar	Juvenile	Ecosystem, Habitat, Prey	NA	Species_interactions, NA Environment,	
385	2to5	Europe	NA	Lab/ Experimental	S. salar	Evolution	Disease	Genetics_Adaptation, Physiology_Condition	Species_interactions, Evolution, Physiology	
386	NA	Northwest	Northwest_Columbia	Projections/ salmon	O. kisutch, O. mykiss, O. tshawytscha	Freshwater_habitat	Contaminants, Flow, Habitat, Temperature_ FW	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
387	10plus	British_Columbia	British_Columbia_not_Fraser	Field/ RemoteSensing	O. keta	Marine	Climate_indices, Density_Food, Temperature_ marine	Growth, Maturation	Species_interactions, Physiology Environment,	
388	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile	Genetics, Temperature_ FW	Genetics_Adaptation, Growth, Physiology_Condition	Evolution, Environment,	Evolution, Physiology
389	2to5	Europe	NA	Field/ RemoteSensing	S. salar	Juvenile	Genetics, Temperature_ FW	Genetics_Adaptation, Growth, Phenology	Evolution, Environment,	Demography, Evolution, Physiology
390	6to10	Alaska	Alaska_W	Field/ RemoteSensing	O. nerka	Upmigration	Fisheries, Genetics, Management	NA	Evolution, , Management	NA
391	10plus	Northwest	Northwest_Coastal, Northwest_Puget_Sound	Field/ RemoteSensing, Model	O. kisutch	Population	Density_Food, Fisheries	Life_history, Mortality, Productivity	Species_interactions, Demography , Management	
392	6to10	California	California_N	Field/ RemoteSensing	Salmonid_ general	Juvenile	Flow, Habitat	Habitat_Distribution	Environment,	Dispersal
393	1	California	California_CV	Lab/ Experimental	O. tshawytscha	Egg, Juvenile	Dissolved_oxygen, Temperature_ FW	Growth, Mortality, Physiology_Condition	Environment,	Demography, Physiology
394	1	California	California_CV	Lab/ Experimental	O. tshawytscha	Egg, Juvenile	Dissolved_oxygen, Temperature_ FW	Carryover, Performance, Physiology_Condition	Environment,	Demography, Physiology



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
395	10plus	East_North_America	NA	Field/RemoteSensing	S. salar	Upmigration	Density_Food, Temperature_FW, Temperature_marine	Phenology	Species_interactions, Environment,	Demography
396	1	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Outmigration	Management, Methods	Mortality	, Management	Demography
397	1	Europe	NA	Field/RemoteSensing, Lab/Experimental	S. trutta	Juvenile, Outmigration	Predators, Temperature_FW	Behaviour, Growth, Mortality, Phenology, Physiology_Condition	Species_interactions, Environment,	Dispersal, Demography, Physiology
398	NA	Northwest	Northwest_Columbia	Model	O. mykiss, O. tshawytscha	Freshwater_habitat, Juvenile, Spawning, Upmigration	Flow, Management	NA	Environment, , Management	NA
399	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	Other_species	Juvenile	Ecosystem, Invasives	NA	Species_interactions,	NA
400	1	Northwest	Northwest_Coastal	Lab/Experimental	O. tshawytscha	Juvenile	Contaminants, Temperature_FW	NA	Environment,	NA
401	1	Europe	NA	Lab/Experimental	O. mykiss	Juvenile	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
402	1	East_North_America	NA	Field/RemoteSensing	S. salar	Evolution	Disease, Habitat, Temperature_FW	Genetics_Adaptation	Species_interactions, Environment,	Evolution
403	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	Salmonid_general	Freshwater_habitat	Climate_indices, Flow	Population_resilience	Environment,	Demography
404	2to5	East_North_America	NA	Field/RemoteSensing	S. salar	Marine, Outmigration	Climate_indices, Prey	Growth	Species_interactions, Environment,	Physiology
405	1	Largescale	NA	Lab/Experimental	General, Other_fish	Marine	Acidity	Performance	Environment,	Physiology
406	1	Northwest	Northwest_Puget_Sound	Lab/Experimental	O. mykiss	Juvenile	Temperature_FW	Growth, Life_history	Environment,	Demography, Physiology
407	2to5	Europe	NA	Field/RemoteSensing, Model	S. trutta	Population	Fisheries, Methods, Temperature_FW	Habitat_Distribution, Mortality, Productivity	Environment, , Management	Dispersal, Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
408	10plus	Europe	NA	Field/ RemoteSensing	S. salar, S. trutta	Juvenile	Habitat	Habitat_Distribution	Environment,	Dispersal
409	1	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing	O. nerka	Upmigration	NA	Behaviour, Mortality, Physiology_Condition		Dispersal, Demography, Physiology
410	NA	NA	NA	Review/ MetaAnalysis	General	General	Acidity, Ecosystem	Livelihood	Species_interactions, Environment,	Management
411	10plus	Largescale	NA	Field/ RemoteSensing, Projections/ physical, Review/ MetaAnalysis	General	Marine	Acidity, Dissolved_oxygen, Temperature_marine	NA	Environment,	NA
412	NA	Largescale	NA	Review/ MetaAnalysis	General	Marine	Acidity, Ecosystem, Temperature_FW	NA	Species_interactions, Environment,	NA
413	NA	Northwest	Northwest_Columbia	Projections/ salmon	O. kisutch, O. mykiss, O. nerka, O. tshawytscha	Upmigration	Flow, Habitat	Population_resilience	Environment,	Demography
414	1	Alaska	Alaska_W	Field/ RemoteSensing, Lab/ Experimental	O. tshawytscha	Upmigration	Methods, Temperature_FW	Performance	Environment,	Physiology
415	NA	Largescale	NA	Field/ RemoteSensing, Model	O. nerka	Marine, Population	Climate_indices, Temperature_marine	Productivity	Environment,	Demography
416	10plus	Largescale	NA	Field/ RemoteSensing	O. tshawytscha	Marine, Population	Climate_indices	Productivity	Environment,	Demography
417	10plus	Alaska	Alaska_S	Field/ RemoteSensing	O. gorbuscha	Marine	Prey	Mortality	Species_interactions,	Demography
418	NA	Northwest	Northwest_Columbia	Review/ MetaAnalysis	General	General	Management, Methods	Livelihood	, Management	Management
419	NA	Largescale	NA	Projections/ ecosystem, Review/ MetaAnalysis	General	Marine	Ecosystem, Environment, Methods	NA	Species_interactions, Environment,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
420	2to5	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Marine	Temperature_marine	Behaviour	Environment,	Dispersal
421	1	Mountain_west	NA	Field/RemoteSensing	O. clarkii	Egg	Habitat, Temperature_FW	Mortality, Performance	Environment,	Demography, Physiology
422	1	Europe	NA	Field/RemoteSensing	S. salar, S. trutta	Juvenile	Habitat	Morphology	Environment,	Physiology
423	6to10	California, Northwest	California_N, Northwest_Coastal	Field/RemoteSensing	Other_species	Marine	Climate_indices, Density_Food, Ecosystem, Temperature_FW	NA	Species_interactions, Environment,	NA
424	NA	California	California_CV	Model	O. tshawytscha	Egg, Population	Density_Food, Flow, Habitat, Temperature_FW	Phenology, Productivity	Species_interactions, Environment,	Demography
425	1	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Spawning	Habitat, Methods	Habitat_Distribution	Environment,	Dispersal
426	6to10	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. tshawytscha	Marine	Prey	Diet, Growth	Species_interactions,	Species_interactions, Physiology
427	1	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. tshawytscha	Marine	Habitat, Prey	Habitat_Distribution	Species_interactions, Environment,	Dispersal
428	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Freshwater_habitat	Habitat, Temperature_FW	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
429	1	Northwest	Northwest_Columbia	Lab/Experimental	O. tshawytscha	Juvenile	Density_Food, Management	Growth, Habitat_Distribution	Species_interactions, , Management	Dispersal, Physiology
430	2to5	Europe	NA	Field/RemoteSensing	O. gorbuscha, S. salar, S. trutta	Juvenile	Density_Food, Invasives	Carryover, Growth	Species_interactions,	Demography, Physiology
431	1	East_North_America	NA	Lab/Experimental	S. fontinalis	Juvenile	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
432	NA	NA	NA	Theoretical/Opinion	General	Freshwater_habitat	Management, Temperature_FW	NA	Environment, , Management	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
433	1	Europe	NA	Lab/ Experimental	Other_species	Marine	Acidity, Ecosystem, Environment	NA	Species_interactions, Environment,	NA
434	1	Alaska	Alaska_SE	Field/ RemoteSensing	O. tshawytscha	Marine	NA	Behaviour		Dispersal
435	NA	British_Columbia	British_Columbia_Fraser	Review/ MetaAnalysis	O. gorbuscha, O. kisutch, O. nerka, O. tshawytscha	Juvenile, Upmigration	Flow, Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
436	1	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing, Lab/ Experimental	O. nerka	Upmigration	Fisheries	Behaviour, Mortality, Physiology_Condition	, Management	Dispersal, Demography, Physiology
437	1	Northwest	British_Columbia_Fraser	Lab/ Experimental	O. nerka	Juvenile	Habitat, Temperature_ FW	NA	Environment,	NA
438	1	Northwest	British_Columbia_Fraser	Lab/ Experimental	O. nerka	Evolution, Upmigration	Flow, Habitat, Temperature_ FW	Genetics_Adaptation, Performance, Physiology_Condition	Environment,	Evolution, Physiology
439	10plus	Northwest	British_Columbia_Fraser	Field/ RemoteSensing, Lab/ Experimental	O. nerka	Upmigration	Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
440	2to5	Northwest	British_Columbia_Fraser	Field/ RemoteSensing, Lab/ Experimental	O. nerka	Juvenile, Upmigration	Flow, Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
441	2to5	British_Columbia	NA	Field/ RemoteSensing	Other_species	Juvenile, Upmigration	Contaminants	NA	Environment,	NA
442	10plus	Europe	NA	Model, Review/ MetaAnalysis	S. salar, S. trutta	Egg, Juvenile	Climate_indices, Temperature_ FW	Growth, Performance, Phenology	Environment,	Demography, Physiology
443	1	East_North_America	NA	Lab/ Experimental	S. fontinalis	Juvenile	Dissolved_oxygen, Temperature_ FW	Performance	Environment,	Physiology
444	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	Other_species	Juvenile	Ecosystem, Invasives	NA	Species_interactions,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
445	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. kisutch, O. tshawytscha	Marine	Density_Food, Flow, Predators	Mortality	Species_interactions, Environment,	Demography
446	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	O. keta, O. kisutch, O. nerka, O. tshawytscha	Marine	Density_Food, Predators	Mortality	Species_interactions,	Demography
447	1	Europe	NA	Lab/Experimental	S. trutta	Juvenile	Density_Food, Habitat	Behaviour, Growth, Habitat_Distribution	Species_interactions, Environment,	Dispersal, Physiology
448	10plus	Europe	NA	Field/RemoteSensing	S. salar	Marine	Fisheries	Life_history, Maturation, Population_resilience	, Management	Demography, Physiology
449	1	Europe	NA	Lab/Experimental	S. salar	Juvenile, Spawning	Management	Behaviour, Performance	, Management	Dispersal, Physiology
450	NA	California	California_CV	Model	O. tshawytscha	Spawning	Flow, Habitat	Habitat_Distribution	Environment,	Dispersal
451	2to5	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	Other_species	Marine	Ecosystem, Environment, Management	NA	Species_interactions, Environment, , Management	NA
452	10plus	Alaska, British_Columbia, Northwest	Alaska_S, Alaska_SE, Alaska_W, British_Columbia_not_Fraser, Northwest_Columbia	Field/RemoteSensing	O. nerka	Marine	Methods	Habitat_Distribution		Dispersal
453	10plus	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. nerka	Marine	Climate_indices, Density_Food, Temperature_marine	Diet, Growth, Habitat_Distribution	Species_interactions, Environment,	Species_interactions, Dispersal, Physiology
454	NA	Northwest	Northwest_Puget_Sound	Model	O. kisutch	Freshwater_habitat	Habitat, Methods, Restoration	Population_resilience	Environment, , Management	Demography
455	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. nerka	Juvenile	Ecosystem	Productivity	Species_interactions,	Demography
456	1	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. tshawytscha	Egg, Evolution, Juvenile, Spawning	Genetics, Habitat	Genetics_Adaptation, Growth, Mortality	Evolution, Environment,	Demography, Evolution, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
457	1	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Upmigration	Temperature_FW	Mortality, Physiology_Condition	Environment,	Demography, Physiology
458	1	Northwest	Northwest_Puget_Sound	Lab/Experimental	O. tshawytscha	Evolution	Genetics, Temperature_FW	Growth, Morphology	Evolution, Environment,	Physiology
459	1	Europe	NA	Field/RemoteSensing	O. mykiss	Juvenile	Disease, Genetics	Immune	Species_interactions, Evolution,	Physiology
460	2to5	Europe	NA	Model	Salmonid_general	Freshwater_habitat	Flow, Temperature_FW	Performance	Environment,	Physiology
461	10plus	Europe	NA	Field/RemoteSensing, Model	S. salar	Juvenile	Flow, Habitat	Habitat_Distribution	Environment,	Dispersal
462	NA	California, Mountain_west, Northwest	Northwest_Columbia	Field/RemoteSensing	Other_species, Salmonid_general	Freshwater_habitat	Environment, Habitat	NA	Environment,	NA
463	NA	Northwest	Northwest_Columbia	Model	S. confluentus	Freshwater_habitat, General, Juvenile, Population	Flow, Habitat, Management, Temperature_FW	Habitat_Distribution, Population_resilience	Environment, , Management	Dispersal, Demography
464	1	California	California_CV	Lab/Experimental	O. tshawytscha	Juvenile	Environment, Habitat	Habitat_Distribution	Environment,	Dispersal
465	6to10	Alaska	Alaska_W	Field/RemoteSensing	O. nerka	Marine	Density_Food, Temperature_marine	Growth, Mortality, Physiology_Condition	Species_interactions, Environment,	Demography, Physiology
466	NA	East_North_America	NA	Review/MetaAnalysis	General	Freshwater_habitat, Juvenile, Outmigration	Environment, Habitat	NA	Environment,	NA
467	NA	British_Columbia	NA	Theoretical/Opinion	O. nerka, Salmonid_general	Upmigration	Dissolved_oxygen, Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
468	NA	NA	NA	Theoretical/Opinion	General	Juvenile	Dissolved_oxygen, Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
469	10plus	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. keta	Spawning	Dissolved_oxygen, Temperature_FW	Mortality, Performance, Population_resilience	Environment,	Demography, Physiology
470	1	Australia_New Zealand	NA	Lab/Experimental	S. fontinalis	Juvenile	Environment	Maturation, Physiology_Condition	Environment,	Physiology
471	NA	NA	NA	Model, Review/MetaAnalysis	O. kisutch, S. confluentus, S. fontinalis, Salmonid_general	Juvenile	Density_Food	Behaviour	Species_interactions,	Dispersal
472	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Juvenile	Environment, Habitat, Temperature_FW	Habitat_Distribution	Environment,	Dispersal
473	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Juvenile	Flow, Habitat	Habitat_Distribution	Environment,	Dispersal
474	10plus	Largescale	NA	Field/RemoteSensing	General	Marine	Ecosystem, Methods, Predators	NA	Species_interactions,	NA
475	10plus	Alaska	Alaska_W	Field/RemoteSensing	O. nerka	Marine	Fisheries	Life_history, Mortality	, Management	Demography
476	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Upmigration	Fisheries	Behaviour, Mortality	, Management	Dispersal, Demography
477	10plus	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. kisutch	Spawning, Upmigration	Contaminants, Habitat	Mortality, Performance	Environment,	Demography, Physiology
478	1	Northwest	Northwest_Columbia	Field/RemoteSensing, Lab/Experimental	O. mykiss	Juvenile, Upmigration	Habitat, Temperature_FW	Growth, Habitat_Distribution, Physiology_Condition	Environment,	Dispersal, Physiology
479	1	Alaska	Alaska_SE	Field/RemoteSensing	O. gorbuscha, O. keta, O. kisutch	Spawning	Dissolved_oxygen, Temperature_FW	Mortality, Performance	Environment,	Demography, Physiology
480	1	Europe	NA	Lab/Experimental	S. trutta	Juvenile	Flow	Morphology	Environment,	Physiology
481	1	Europe	NA	Lab/Experimental	S. trutta	Spawning	Temperature_FW	Morphology	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
482	1	Northwest	Northwest_Coastal	Field/RemoteSensing	O. kisutch	Marine	Prey	NA	Species_interactions,	NA
483	1	Alaska	Alaska_SE	Field/RemoteSensing	O. keta	Marine	Density_Food	Growth, Physiology_Condition	Species_interactions,	Physiology
484	2to5	Alaska	Alaska_SE	Field/RemoteSensing	O. gorbuscha, O. keta, O. kisutch, O. nerka	Marine	Environment, Prey, Temperature_marine	Growth, Physiology_Condition	Species_interactions,	Physiology Environment,
485	NA	East_North_America	NA	Review/MetaAnalysis	Other_fish, Salmonid_general	Juvenile	Density_Food, Temperature_FW	Growth, Physiology_Condition	Species_interactions,	Physiology Environment,
486	10plus	California, Northwest	California_N, California_S, Northwest_Coastal	Model	Other_species	Marine	Ecosystem, Environment	NA	Species_interactions,	NA Environment,
487	10plus	California, Northwest	California_N, California_S, Northwest_Coastal	Field/RemoteSensing, Model	Other_species	Marine	Density_Food, Ecosystem, Environment	NA	Species_interactions,	NA Environment,
488	10plus	California	California_N, California_S	Model	Other_species	Marine	Predators	NA	Species_interactions,	NA
489	NA	California, Northwest	California_N, California_S, Northwest_Coastal	Model	Other_fish	Marine	Prey	Habitat_Distribution	Species_interactions,	Dispersal
490	10plus	California, Northwest	California_N, California_S, Northwest_Coastal	Field/RemoteSensing	Other_fish	Marine	Density_Food, Temperature_marine	Habitat_Distribution	Species_interactions,	Dispersal Environment,
491	10plus	Australia_New Zealand	NA	Field/RemoteSensing, Model, Projections/ecosystem	Other_fish	Marine	Temperature_FW, Temperature_marine	Habitat_Distribution	Environment,	Dispersal
492	10plus	Europe	NA	Projections/salmon	S. trutta	Freshwater_habitat	Flow, Habitat, Temperature_FW	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
493	2to5	Europe	NA	Field/RemoteSensing	S. trutta	Population	Genetics	Genetics_Adaptation, Habitat_Distribution	Evolution,	Dispersal, Evolution



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
494	10plus	Largescale	NA	Field/ RemoteSensing	General	Population	Climate_indice s, Temperature_ marine	Productivity	Environment,	Demography
495	1	Europe	NA	Lab/ Experimental	S. salar	Egg, Juvenile	Temperature_ FW	Growth	Environment,	Physiology
496	NA	Europe	NA	Field/ RemoteSensing, Projections/ salmon	Other_fish	Outmigration	Density_Food, Temperature_ FW	Habitat_Distribution, Life_history	Species_interactions, Environment,	Dispersal, Demography
497	2to5	Europe	NA	Lab/ Experimental	S. salar	Juvenile	Density_Food	Behaviour	Species_interactions,	Dispersal
498	10plus	East_North_A merica	NA	Field/ RemoteSensing	Other_species	Marine	Ecosystem, Predators	Mortality, Physiology_Condition	Species_interactions,	Demography, Physiology
499	10plus	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. kisutch	Marine	Habitat	Habitat_Distribution	Environment,	Dispersal
500	2to5	Largescale	NA	Field/ RemoteSensing	O. gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha	Marine	Habitat	Habitat_Distribution	Environment,	Dispersal
501	NA	California, Northwest	California_CV, California_N, Northwest_Co astal, Northwest_Col umbia	Model, Projections/ salmon	O. tshawytscha	Upmigration	Habitat, Management, Temperature_ FW	Physiology_Condition	Environment, , Management	Physiology
502	1	Japan	NA	Lab/ Experimental	O. masou, Other_fish	Egg	Methods	Phenology		Demography
503	1	Europe	NA	Lab/ Experimental	S. salar	Marine	Acidity	Mortality	Environment,	Demography
504	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile	Acidity	Growth	Environment,	Physiology
505	2to5	Europe	NA	Lab/ Experimental	S. salar	Outmigration	Environment, Temperature_ FW	Maturation, Phenology	Environment,	Demography, Physiology
506	2to5	Europe	NA	Field/ RemoteSensing	S. salar	Outmigration	Habitat, Management, Predators	Behaviour, Mortality, Phenology	Species_interactions, Environment, , Management	Dispersal, Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
507	NA	NA	NA	Review/ MetaAnalysis	Salmonid_ general	Freshwater_ha bitat	Habitat	NA	Environment,	NA
508	NA	Northwest	Northwest_Co astal	Projections/ physical, Projections/ salmon	O. kisutch, O. mykiss, O. tshawytscha	Outmigration	Habitat, Restoration	NA	Environment, , Management	NA
509	10plus	Northwest	Northwest_Co astal, Northwest_Col umbia	Projections/ salmon	O. kisutch	Upmigration	Flow, Temperature_ FW	Phenology	Environment,	Demography
510	10plus	British_Colum bia	British_Colum bia_not_Fraser	Field/ RemoteSensing	O. clarkii, O. kisutch	Juvenile, Population	NA	Productivity		Demography
511	NA	Largescale	NA	Model, Projections/ ecosystem	Other_species	Marine	Acidity, Ecosystem	Habitat_Distribution	Species_interactions, Environment,	Dispersal
512	NA	NA	NA	Theoretical/ Opinion	Other_species	Population	NA	Habitat_Distribution, Phenology		Dispersal, Demography
513	2to5	Europe	NA	Field/ RemoteSensing, Lab/ Experimental	S. trutta	Egg, Population	Environment, Temperature_ FW	Habitat_Distribution, Morphology, Mortality	Environment,	Dispersal, Demography, Physiology
514	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile, Outmigration	Density_Food, Dissolved_oxyg en, Temperature_ FW	Behaviour, Physiology_Condition	Species_interactions, Environment,	Dispersal, Physiology
515	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile	Density_Food, Dissolved_oxyg en, Temperature_ FW	Behaviour, Physiology_Condition	Species_interactions, Environment,	Dispersal, Physiology
516	NA	Northwest	Northwest_Col umbia	Model	O. mykiss, O. tshawytscha, Salmonid_ general	Freshwater_ha bitat	Habitat, Management, Restoration	Population_resilience, Productivity	Environment, , Management	Demography
517	NA	Mountain_we st	NA	Model	O. clarkii, S. trutta	Spawning	Contaminants	Growth, Productivity	Environment,	Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
518	10plus	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. gorbuscha, O. keta, O. nerka, O. tshawytscha	Marine	Predators	Mortality	Species_interactions,	Demography
519	NA	Northwest	Northwest_Columbia	Review/MetaAnalysis	O. mykiss, O. tshawytscha	Upmigration	Genetics	Genetics_Adaptation, Phenology	Evolution,	Demography, Evolution
520	NA	Northwest	Northwest_Coastal, Northwest_Columbia	Review/MetaAnalysis	O. keta, O. kisutch, O. mykiss, O. nerka, O. tshawytscha	Population	NA	Population_resilience, Productivity		Demography
521	1	Largescale	NA	Lab/Experimental	O. tshawytscha, Other_species	Upmigration	Acidity	Performance	Environment,	Physiology
522	NA	NA	NA	Review/MetaAnalysis	General	Marine	Acidity, Contaminants, Dissolved_oxygen	Morphology, Performance	Environment,	Physiology
523	6to10	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. mykiss	Population	Habitat, Management, Restoration	Genetics_Adaptation	Environment, , Management	Evolution
524	1	Mountain_west	NA	Field/RemoteSensing, Lab/Experimental	O. mykiss	Juvenile	Contaminants	Physiology_Condition	Environment,	Physiology
525	1	Europe	NA	Lab/Experimental	Other_fish	Juvenile, Marine	Acidity	NA	Environment,	NA
526	NA	Europe	NA	Review/MetaAnalysis	General	Marine	Contaminants	Performance	Environment,	Physiology
527	NA	East_North_America	NA	Theoretical/Opinion	S. salar	Evolution	Genetics	Genetics_Adaptation, Life_history, Population_resilience	Evolution,	Demography, Evolution
528	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Spawning	NA	Genetics_Adaptation, Habitat_Distribution, Phenology		Dispersal, Demography, Evolution
529	2to5	Europe	NA	Lab/Experimental	S. salar	Juvenile	Temperature_FW	Growth, Maturation, Physiology_Condition	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
530	2to5	East_North_America	NA	Field/RemoteSensing	S. salar	Spawning, Upmigration	Flow, Habitat, Management, Temperature_FW	Habitat_Distribution	Environment, , Management	Dispersal
531	1	East_North_America	NA	Field/RemoteSensing	S. salar	Upmigration	Habitat, Temperature_FW	Behaviour, Habitat_Distribution	Environment,	Dispersal
532	2to5	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Marine, Outmigration	Density_Food	Growth, Phenology	Species_interactions,	Demography, Physiology
533	10plus	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Population	Management	Population_resilience, Productivity	, Management	Demography
534	6to10	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing, Model	O. tshawytscha	Marine, Population	NA	Habitat_Distribution, Life_history		Dispersal, Demography
535	10plus	East_North_America, Europe	NA	Field/RemoteSensing	S. salar	Marine	Density_Food, Environment, Temperature_marine	Growth	Species_interactions, Environment,	Physiology
536	10plus	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. mykiss	Juvenile, Marine	Temperature_marine	Growth, Mortality	Environment,	Demography, Physiology
537	10plus	East_North_America, Europe	NA	Field/RemoteSensing	S. salar	Marine, Population	Climate_indices	Productivity	Environment,	Demography
538	10plus	East_North_America	NA	Field/RemoteSensing	S. salar	Marine	Predators	Mortality	Species_interactions,	Demography
539	10plus	California	California_CV	Field/RemoteSensing	O. tshawytscha	General, Juvenile, Marine, Population	Environment, Flow, Predators, Temperature_FW	Productivity	Species_interactions, Environment,	Demography
540	2to5	Largescale	NA	Field/RemoteSensing	O. tshawytscha	Marine	Prey	Habitat_Distribution	Species_interactions,	Dispersal
541	2to5	Largescale	NA	Lab/Experimental	Other_fish	Marine	Acidity	NA	Environment,	NA
542	1	British_Columbia	British_Columbia_not_Fraser	Lab/Experimental	O. gorbuscha	Marine, Outmigration	Acidity, Dissolved_oxygen	Physiology_Condition	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
543	1	Europe	NA	Lab/ Experimental	O. mykiss	Juvenile	Dissolved_oxygen, Predators, Temperature_FW	Behaviour	Species_interactions, Environment,	Dispersal
544	10plus	Alaska	Alaska_W	Field/ RemoteSensing	O. gorbuscha, O. keta	Marine	Density_Food	Growth	Species_interactions,	Physiology
545	10plus	Alaska, Japan, Russia	Alaska_W	Field/ RemoteSensing	O. gorbuscha, O. keta	Marine	Density_Food, Temperature_marine	Growth	Species_interactions, Environment,	Physiology
546	1	Northwest	Northwest_Columbia	Lab/ Experimental	O. tshawytscha	Egg	Temperature_FW	Phenology, Physiology_Condition	Environment,	Demography, Physiology
547	NA	Japan	NA	Field/ RemoteSensing, Model	Other_fish	General, Population	Habitat, Temperature_FW	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
548	10plus	Alaska	Alaska_W	Field/ RemoteSensing	Other_fish	Marine	Climate_indices, Ecosystem, Fisheries, Prey	NA	Species_interactions, Environment, , Management	NA
549	NA	Northwest	NA	Model	O. tshawytscha	Juvenile	Habitat, Temperature_FW	Growth, Phenology	Environment,	Demography, Physiology
550	1	Largescale	NA	Field/ RemoteSensing, Projections/physical	Salmonid_general	Freshwater_habitat	Habitat, Temperature_FW	NA	Environment,	NA
551	6to10	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing	O. nerka	Outmigration	Predators	Behaviour, Mortality	Species_interactions,	Dispersal, Demography
552	NA	NA	NA	Review/ MetaAnalysis	General, Salmonid_general	General, Upmigration	Fisheries, Management, Temperature_FW	Mortality	Environment, , Management	Demography
553	1	British_Columbia	British_Columbia_Fraser	Lab/ Experimental	O. nerka	Upmigration	Fisheries, Temperature_FW	Physiology_Condition	Environment, , Management	Physiology
554	2to5	East_North_America	NA	Field/ RemoteSensing	S. malma	Marine, Outmigration	Environment, Temperature_marine	Habitat_Distribution, Phenology	Environment,	Dispersal, Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
555	2to5	South_America	NA	Lab/Experimental	O. mykiss	Juvenile	Genetics, Temperature_FW	Growth, Mortality, Phenology, Physiology_Condition	Evolution, Environment,	Demography, Physiology
556	2to5	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. tshawytscha	Marine	Habitat	Growth, Habitat_Distribution, Mortality	Environment,	Dispersal, Demography, Physiology
557	1	East_North_America	NA	Lab/Experimental	Other_fish, S. salar	Upmigration	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
558	1	East_North_America	NA	Lab/Experimental	S. salar	Juvenile, Marine	Dissolved_oxygen, Temperature_FW	Mortality	Environment,	Demography
559	NA	Largescale	NA	Review/MetaAnalysis	Other_species	Marine	Ecosystem, Environment, Temperature_marine	NA	Species_interactions, Environment,	NA
560	1	Northwest	Northwest_Columbia	Lab/Experimental	O. mykiss	Evolution	Dissolved_oxygen, Genetics, Temperature_FW	Genetics_Adaptation, Performance, Physiology_Condition	Evolution, Environment,	Evolution, Physiology
561	10plus	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	General	General	Ecosystem, Environment	NA	Species_interactions, Environment,	NA
562	NA	NA	NA	Theoretical/Opinion	Salmonid_general	General, Outmigration	Fisheries, Management	Population_resilience	, Management	Demography
563	1	Asia_other	NA	Lab/Experimental	O. mykiss	Outmigration	Temperature_FW, Temperature_marine	Growth, Physiology_Condition	Environment,	Physiology
564	1	Asia_other	NA	Lab/Experimental	O. mykiss	Outmigration	Environment, Temperature_FW, Temperature_marine	Growth, Physiology_Condition	Environment,	Physiology
565	NA	NA	NA	Review/MetaAnalysis	General	General	Ecosystem, Methods	NA	Species_interactions,	NA
566	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. keta, O. tshawytscha	Spawning	Flow, Habitat, Temperature_FW	Behaviour, Habitat_Distribution	Environment,	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
567	NA	Northwest	Northwest_Columbia	Lab/Experimental	O. tshawytscha	Juvenile	Temperature_FW	Growth, Mortality	Environment,	Demography, Physiology
568	1	Northwest	Northwest_Columbia	Lab/Experimental	O. tshawytscha	Juvenile	Density_Food, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
569	10plus	Largescale	NA	Field/RemoteSensing	Other_fish	Marine	Fisheries, Temperature_marine	Growth	Environment, , Management	Physiology
570	1	Europe	NA	Lab/Experimental	Other_fish	Juvenile	Temperature_FW	Morphology	Environment,	Physiology
571	1	East_North_America	NA	Lab/Experimental	S. salar	Marine	Temperature_marine	Physiology_Condition	Environment,	Physiology
572	1	East_North_America	NA	Field/RemoteSensing, Lab/Experimental	S. salar	Marine	Temperature_marine	Growth, Physiology_Condition	Environment,	Physiology
573	NA	Northwest	Northwest_Columbia, Northwest_Columbia	Review/MetaAnalysis	General	Freshwater_habitat, General	Ecosystem, Invasives	Habitat_Distribution	Species_interactions,	Dispersal
574	NA	NA	NA	Review/MetaAnalysis	Salmonid_general	Juvenile	Management	Productivity	, Management	Demography
575	10plus	Alaska	Alaska_SE	Field/RemoteSensing	O. gorbuscha	Egg, Spawning	Genetics	Genetics_Adaptation, Phenology, Population_resilience	Evolution,	Demography, Evolution
576	10plus	California, Northwest	California_N, California_S, Northwest_Columbia	Field/RemoteSensing	Other_species	Marine	Contaminants, Ecosystem, Environment, Predators	NA	Species_interactions, Environment,	NA
577	6to10	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing, Model	O. mykiss	Juvenile	Flow, Management, Temperature_FW	Growth, Physiology_Condition	Environment, , Management	Physiology
578	NA	NA	NA	Model	O. kisutch	Population	Density_Food, Flow, Management	Life_history, Mortality, Population_resilience, Productivity	Species_interactions, Environment, , Management	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
579	NA	NA	NA	Model	General	Evolution, Juvenile, Marine, Outmigration, Upmigration	Temperature_FW	Phenology	Environment,	Demography
580	2to5	East_North_America	NA	Field/RemoteSensing, Lab/Experimental	O. mykiss, Other_fish	Upmigration	Flow, Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
581	1	East_North_America	NA	Lab/Experimental	Other_fish	Upmigration	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
582	10plus	Europe	NA	Review/MetaAnalysis	S. salar	Marine	Genetics	Habitat_Distribution	Evolution,	Dispersal
583	10plus	Europe	NA	Field/RemoteSensing	S. salar, S. trutta	Juvenile	Density_Food, Flow	Habitat_Distribution	Species_interactions, Environment,	Dispersal
584	1	California	California_CV	Lab/Experimental	O. mykiss	Juvenile, Outmigration	Environment, Temperature_FW	Mortality, Physiology_Condition	Environment,	Demography, Physiology
585	NA	California	California_CV	Lab/Experimental	O. tshawytscha	Juvenile	Contaminants, Temperature_FW	Physiology_Condition	Environment,	Physiology
586	1	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. clarkii	Population	Genetics, Management	Habitat_Distribution, Population_resilience	Evolution, , Management	Dispersal, Demography
587	NA	NA	NA	Review/MetaAnalysis	Other_species	General	Contaminants, Dissolved_oxygen, Ecosystem, Environment	NA	Species_interactions, Environment,	NA
588	1	Europe	NA	Lab/Experimental	Other_fish	Marine	Temperature_marine	Performance	Environment,	Physiology
589	10plus	Europe	NA	Field/RemoteSensing	S. salar	Juvenile	Density_Food, Flow, Temperature_FW	Habitat_Distribution, Productivity	Species_interactions, Environment,	Dispersal, Demography
590	NA	NA	NA	Review/MetaAnalysis, Theoretical/Opinion	Other_species	General	Contaminants, Ecosystem, Environment	NA	Species_interactions, Environment,	NA



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
591	1	Europe	NA	Lab/ Experimental	S. salar	Marine	Disease, Temperature_ marine	Growth, Mortality, Physiology_Condition	Species_interactions, Environment,	Demography, Physiology
592	10plus	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile	Flow, Temperature_ FW	Habitat_Distribution	Environment,	Dispersal
593	10plus	California	California_CV	Field/ RemoteSensing	O. tshawytscha, Other_fish	Outmigration	Predators, Temperature_ marine	Habitat_Distribution	Species_interactions, Environment,	Dispersal
594	6to10	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile	Density_Food, Flow, Prey	Behaviour	Species_interactions, Environment,	Dispersal
595	10plus	Northwest	Northwest_Pu get_Sound	Field/ RemoteSensing	O. nerka, O. tshawytscha	Spawning, Upmigration	Habitat, Temperature_ FW	Behaviour, Phenology	Environment,	Dispersal, Demography
596	10plus	Northwest	Northwest_Pu get_Sound	Field/ RemoteSensing	S. confluentus	Outmigration	Prey, Temperature_ FW	Habitat_Distribution, Phenology	Species_interactions, Environment,	Dispersal, Demography
597	6to10	Europe	NA	Field/ RemoteSensing, Model	S. trutta	Freshwater_ha bitat	Habitat	Habitat_Distribution	Environment,	Dispersal
598	NA	Mountain_we st, Northwest	Northwest_Col umbia	Field/ RemoteSensing, Model, Projections/ salmon	O. mykiss, O. tshawytscha, S. confluentus	Egg	Flow, Habitat	Mortality	Environment,	Demography
599	NA	Northwest	Northwest_Col umbia	Field/ RemoteSensing, Model	Salmonid_ general	Juvenile, Outmigration	Flow, Habitat	Behaviour, Habitat_Distribution	Environment,	Dispersal
600	2to5	Alaska	Alaska_W	Field/ RemoteSensing	O. keta, O. nerka	Upmigration	Disease, Temperature_ FW	Mortality, Performance	Species_interactions, Environment,	Demography, Physiology
601	10plus	Russia	NA	Field/ RemoteSensing	O. gorbuscha, O. keta, O. kisutch	Population	NA	Life_history, Maturation, Productivity		Demography, Physiology
602	2to5	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. tshawytscha	Juvenile, Marine, Outmigration	Flow, Management, Temperature_ FW	Carryover, Mortality	Environment, , Management	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
603	1	Northwest	Northwest_Puget_Sound	Lab/Experimental	O. mykiss	Juvenile	Density_Food, Temperature_FW	Genetics_Adaptation, Mortality	Species_interactions, Environment,	Demography, Evolution*
604	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Marine, Outmigration	Climate_indices, Flow, Management, Temperature_FW, Temperature_marine	Carryover, Mortality	Environment, , Management	Demography
605	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. kisutch, O. tshawytscha	Freshwater_habitat, Marine	Environment, Habitat, Temperature_FW, Temperature_marine	Productivity	Environment,	Demography
606	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Juvenile, Marine, Outmigration	Climate_indices, Management	Carryover, Mortality	Environment, , Management	Demography
607	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing, Model, Review/MetaAnalysis	General	Egg, Freshwater_habitat	Environment, Flow, Habitat	NA	Environment,	NA
608	1	British_Columbia	British_Columbia_Fraser	Lab/Experimental	O. nerka	Juvenile	Genetics, Temperature_FW	Performance, Physiology_Condition	Evolution, Environment,	Physiology
609	1	East_North_America	NA	Lab/Experimental	Other_fish	Marine	Density_Food	Performance, Physiology_Condition	Species_interactions,	Physiology
610	NA	Northwest	Northwest_Puget_Sound	Field/RemoteSensing, Review/MetaAnalysis	O. tshawytscha	Freshwater_habitat, General	Habitat, Restoration, Temperature_FW	Population_resilience	Environment, , Management	Demography
611	NA	Alaska, British_Columbia, Largescale, Northwest	NA	Review/MetaAnalysis	O. gorbuscha, O. keta, O. mykiss, O. nerka, O. tshawytscha	Marine	Prey	Habitat_Distribution	Species_interactions,	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
612	NA	Alaska, British_Columbia, Largescale, Northwest	NA	Review/ MetaAnalysis	O. keta, O. kisutch, O. mykiss, O. nerka, O. tshawytscha	Marine	Density_Food, Ecosystem, Prey	Habitat_Distribution	Species_interactions,	Dispersal
613	NA	NA	NA	Review/ MetaAnalysis	General	General	Predators, Temperature_FW	Genetics_Adaptation, Life_history	Species_interactions, Environment,	Demography, Evolution
614	NA	East_North_America	NA	Theoretical/ Opinion	S. salar	General	Management	Population_resilience	, Management	Demography
615	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Juvenile, Marine	NA	Carryover, Growth, Maturation, Mortality		Demography, Physiology
616	10plus	Europe	NA	Theoretical/ Opinion	S. salar	Juvenile, Marine	NA	Growth, Mortality		Demography, Physiology
617	10plus	Europe	NA	Lab/ Experimental	S. salar	Juvenile, Population	Density_Food, Flow, Temperature_FW	Mortality, Productivity	Species_interactions, Environment,	Demography
618	10plus	East_North_America	NA	Field/ RemoteSensing	Other_fish	Juvenile, Marine	Fisheries	Growth, Life_history, Population_resilience	, Management	Demography, Physiology
619	NA	Largescale	NA	Review/ MetaAnalysis	General	Marine	Ecosystem, Environment, Fisheries, Management	NA	Species_interactions, Environment, , Management	NA
620	NA	NA	NA	Review/ MetaAnalysis	Other_species	General	Contaminants, Ecosystem, Environment	NA	Species_interactions, Environment,	NA
621	10plus	Alaska	Alaska_S	Field/ RemoteSensing, Projections/ physical	O. nerka	Juvenile	Habitat, Prey, Temperature_FW	Growth, Physiology_Condition	Species_interactions, Environment,	Physiology
622	10plus	Alaska	Alaska_S	Field/ RemoteSensing	O. nerka	Juvenile	Environment, Habitat, Temperature_FW	Growth	Environment,	Physiology
623	NA	Largescale	NA	Review/ MetaAnalysis	General	General, Marine	Ecosystem	NA	Species_interactions,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
624	1	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Outmigration	Flow, Management	Behaviour, Mortality, Performance	Environment, , Management	Dispersal, Demography, Physiology
625	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Egg	Temperature_ FW	Habitat_Distribution, Phenology	Environment,	Dispersal, Demography
626	10plus	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing, Model	O. nerka	Juvenile	Density_Food, Predators, Prey	Productivity	Species_interactions,	Demography
627	NA	Mountain_west	NA	Theoretical/ Opinion	O. clarkii	General	Management	Population_resilience	, Management	Demography
628	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. mykiss	Outmigration	Density_Food, Predators	Mortality	Species_interactions,	Demography
629	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. mykiss, O. tshawytscha	Juvenile, Marine, Outmigration	Climate_indice s, Flow, Management	Mortality	Environment, , Management	Demography
630	NA	Largescale	NA	Model	General	Freshwater_habitat	Flow	NA	Environment,	NA
631	10plus	British_Columbia	British_Columbia_Fraser	Model	General	Freshwater_habitat	Management, Methods, Temperature_ FW	NA	Environment, , Management	NA
632	NA	British_Columbia	British_Columbia_Fraser	Model, Projections/ salmon	O. nerka	Upmigration	Temperature_ FW	Mortality, Physiology_Condition	Environment,	Demography, Physiology
633	1	Northwest	Northwest_Columbia	Field/ RemoteSensing, Model	General	Freshwater_habitat	Flow, Methods, Restoration, Temperature_ FW	NA	Environment, , Management	NA
634	NA	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. tshawytscha	Juvenile	Flow, Habitat	Productivity	Environment,	Demography
635	2to5	California	California_N	Field/ RemoteSensing	O. kisutch, O. tshawytscha	Juvenile, Upmigration	Disease, Temperature_ FW	Mortality	Species_interactions, Environment,	Demography
636	2to5	California	California_N	Projections/ physical	General	Freshwater_habitat	Flow, Management, Temperature_ FW	NA	Environment, , Management	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
637	NA	Northwest	Northwest_Coastal, Northwest_Columbia, Northwest_Puget_Sound	Projections/physical	General	Freshwater_habitat	Ecosystem, Environment	NA	Species_interactions, Environment,	NA
638	1	Europe	NA	Lab/Experimental	S. salar	Marine	Disease, Temperature_FW	NA	Species_interactions, Environment,	NA
639	NA	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Evolution	Flow, Genetics, Habitat, Temperature_FW	Genetics_Adaptation	Evolution, Environment,	Evolution
640	2to5	Europe	NA	Lab/Experimental	S. salar	Juvenile	Environment, Temperature_FW	Growth, Physiology_Condition	Environment,	Physiology
641	1	Europe	NA	Lab/Experimental	S. salar	Juvenile	Temperature_FW	Growth, Physiology_Condition	Environment,	Physiology
642	1	Europe	NA	Lab/Experimental	S. salar	Juvenile, Outmigration	Temperature_FW	Physiology_Condition	Environment,	Physiology
643	1	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Spawning	Flow, Habitat, Management	NA	Environment, , Management	NA
644	6to10	Northwest	Northwest_Columbia	Model, Projections/salmon	O. kisutch, O. mykiss, O. tshawytscha	Juvenile	Temperature_FW	Growth, Population_resilience	Environment,	Demography, Physiology
645	6to10	British_Columbia, Northwest	British_Columbia_not_Fraser, Northwest_Coastal, Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Marine	Predators	Mortality	Species_interactions,	Demography
646	2to5	East_North_America	NA	Field/RemoteSensing	S. salar	Juvenile	Management, Temperature_FW	Carryover, Mortality	Environment, , Management	Demography
647	NA	Northwest	Northwest_Columbia	Model, Projections/salmon	O. mykiss	Juvenile	Prey, Temperature_FW	Growth, Physiology_Condition	Species_interactions, Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
648	NA	East_North_America	NA	Review/ MetaAnalysis	S. salar	Marine	Ecosystem, Environment	Habitat_Distribution, Population_resilience	Species_interactions, Environment,	Dispersal, Demography
649	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile	Environment, Temperature_ FW	Growth	Environment,	Physiology
650	1	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. mykiss, O. tshawytscha	Outmigration	Habitat	Behaviour, Habitat_Distribution, Mortality	Environment,	Dispersal, Demography
651	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Juvenile	Temperature_ FW	Carryover, Growth, Maturation, Mortality	Environment,	Demography, Physiology
652	1	East_North_America	NA	Lab/ Experimental	O. mykiss	Juvenile	Genetics, Temperature_ FW	Growth, Physiology_Condition	Evolution, Environment,	Physiology
653	1	Northwest	Northwest_Columbia	Lab/ Experimental	O. tshawytscha	Juvenile	Density_Food, Prey	Growth	Species_interactions,	Physiology
654	1	British_Columbia	British_Columbia_not_Fraser	Field/ RemoteSensing	O. tshawytscha	Upmigration	Flow, Habitat, Temperature_ FW	Behaviour, Performance, Physiology_Condition	Environment,	Dispersal, Physiology
655	NA	NA	NA	Review/ MetaAnalysis	General	Juvenile	Acidity	NA	Environment,	NA
656	2to5	British_Columbia	British_Columbia_not_Fraser	Field/ RemoteSensing, Model	O. tshawytscha	Upmigration	Habitat, Temperature_ FW	Behaviour, Physiology_Condition	Environment,	Dispersal, Physiology
657	NA	NA	NA	Review/ MetaAnalysis	General, Salmonid_ general	Evolution	Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
658	NA	NA	NA	Model	Other_fish, Salmonid_ general	General, Juvenile	Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
659	NA	California, Northwest	NA	Review/ MetaAnalysis	Other_fish	General, Juvenile	Invasives	NA	Species_interactions,	NA
660	10plus	Northwest	Northwest_Columbia	Projections/ physical	O. tshawytscha	Juvenile, Spawning	Flow, Habitat, Management, Temperature_ FW	Habitat_Distribution	Environment, , Management	Dispersal
661	1	Europe	NA	Lab/ Experimental	Other_species	Marine	Acidity	NA	Environment,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
662	NA	Northwest	Northwest_Columbia	Model, Projections/ salmon	O. tshawytscha	Juvenile	Invasives, Predators, Temperature_FW	Behaviour, Habitat_Distribution, Life_history, Mortality, Phenology	Species_interactions, Environment,	Dispersal, Demography
663	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Spawning	Flow, Temperature_FW	Phenology	Environment,	Demography
664	NA	NA	NA	Theoretical/ Opinion	General	Juvenile	Flow, Habitat, Management	NA	Environment, , Management	NA
665	NA	NA	NA	Review/ MetaAnalysis	Salmonid_general	Egg, Juvenile	Flow, Management	Mortality	Environment, , Management	Demography
666	6to10	Australia_New Zealand	NA	Field/ RemoteSensing	S. trutta	Juvenile	Density_Food, Flow, Management	Growth, Mortality	Species_interactions, Environment, , Management	Demography, Physiology
667	2to5	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. tshawytscha	Marine	Habitat	Habitat_Distribution, Phenology	Environment,	Dispersal, Demography
668	NA	Largescale	NA	Review/ MetaAnalysis	O. mykiss, S. salar	Marine	NA	Behaviour, Habitat_Distribution, Life_history, Phenology		Dispersal, Demography
669	6to10	California	California_S	Field/ RemoteSensing	O. mykiss	Juvenile, Outmigration	Habitat	Growth, Habitat_Distribution, Phenology	Environment,	Dispersal, Demography, Physiology
670	NA	Largescale	NA	Model, Projections/ ecosystem	Other_fish, Other_species	Marine	Ecosystem, Environment, Habitat, Predators, Temperature_marine	Habitat_Distribution	Species_interactions, Environment,	Dispersal
671	NA	British_Columbia	British_Columbia_not_Fraser	Model, Theoretical/ Opinion	O. nerka	General	Density_Food, Predators, Prey, Temperature_FW, Temperature_marine	Carryover, Growth, Mortality, Population_resilience	Species_interactions, Environment,	Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
672	NA	Europe	NA	Review/ MetaAnalysis	General, Other_fish, Other_species	Marine	Acidity, Ecosystem, Environment, Temperature_ marine	Phenology, Population_resilience	Species_interactions, Environment,	Demography
673	2to5	Largescale	NA	Field/ RemoteSensing	O. tshawytscha	Evolution	Environment, Genetics, Habitat, Temperature_ FW	Genetics_Adaptation	Evolution, Environment,	Evolution
674	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. clarkii	Freshwater_habitat, General	Habitat	Habitat_Distribution, Life_history	Environment,	Dispersal, Demography
675	NA	Europe	NA	Model, Projections/ salmon	S. salar	Juvenile	Environment, Flow, Temperature_ FW	Growth, Phenology, Population_resilience, Productivity	Environment,	Demography, Physiology
676	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Juvenile, Outmigration	Habitat, Temperature_ FW	Life_history, Phenology	Environment,	Demography
677	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile	NA	Behaviour, Habitat_Distribution		Dispersal
678	10plus	Europe	NA	Field/ RemoteSensing	S. salar, S. trutta	Freshwater_habitat	Flow, Habitat, Management, Temperature_ FW	NA	Environment, , Management	NA
679	NA	Largescale	NA	Model, Projections/ physical	General	Freshwater_habitat	Environment, Habitat, Temperature_ FW	NA	Environment,	NA
680	2to5	Mountain_west	NA	Field/ RemoteSensing	O. clarkii, O. mykiss	Juvenile	Genetics, Habitat, Management, Temperature_ FW	NA	Evolution, Environment, , Management	NA
681	NA	Northwest	Northwest_Columbia	Model, Projections/ salmon	O. clarkii, S. confluentus	Juvenile	Habitat, Temperature_ FW	Habitat_Distribution	Environment,	Dispersal



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
682	2to5	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile, Outmigration	Flow, Habitat, Temperature_ FW	Mortality	Environment,	Demography
683	10plus	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Marine	Environment, Habitat	Growth, Mortality	Environment,	Demography, Physiology
684	NA	Largescale	NA	Model, Projections/ ecosystem	General	Marine	Ecosystem, Environment, Fisheries, Temperature_ marine	NA	Species_interactions, Environment, , Management	NA
685	2to5	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile	Contaminants, Habitat	Growth	Environment,	Physiology
686	NA	California	California_CV	Review/ MetaAnalysis	O. kisutch, O. mykiss, O. tshawytscha	General	Habitat, Management	Population_resilience, Productivity	Environment, , Management	Demography
687	1	East_North_A merica	NA	Field/ RemoteSensing, Lab/ Experimental	S. fontinalis, S. trutta	Juvenile	Density_Food, Temperature_ FW	Growth	Species_interactions, Environment,	Physiology
688	1	Largescale	NA	Field/ RemoteSensing	O. tshawytscha	Marine	Prey, Temperature_ FW	Diet	Species_interactions, Environment,	Species_interactio ns
689	2to5	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. tshawytscha	Upmigration	Genetics	Phenology	Evolution,	Demography
690	NA	NA	NA	Review/ MetaAnalysis	Salmonid_ general	Freshwater_ha bitat, Juvenile	Habitat, Management, Temperature_ FW	Performance, Physiology_Condition	Environment, , Management	Physiology
691	NA	NA	NA	Review/ MetaAnalysis	General	Marine	Acidity	Physiology_Condition	Environment,	Physiology
692	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile, Marine	Temperature_ FW	Growth, Physiology_Condition	Environment,	Physiology
693	NA	NA	NA	Model, Theoretical/ Opinion	General	Juvenile	Flow, Management, Methods	Population_resilience	Environment, , Management	Demography
694	10plus	British_Colum bia	British_Columb ia_not_Fraser	Field/ RemoteSensing	O. nerka	General	Habitat, Management	Population_resilience, Productivity	Environment, , Management	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
695	NA	NA	NA	Review/ MetaAnalysis	General	General	Ecosystem, Environment	NA	Species_interactions, NA Environment,	
696	1	Mountain_west	NA	Field/ RemoteSensing	O. clarkii	Freshwater_habitat, Juvenile, Upmigration	Habitat, Management, Temperature_FW	Habitat_Distribution	Environment, , Management	Dispersal
697	NA	British_Columbia	British_Columbia_Fraser	Review/ MetaAnalysis	O. nerka, O. tshawytscha	Upmigration	Temperature_FW	Immune, Mortality, Physiology_Condition	Environment,	Demography, Physiology
698	NA	British_Columbia	British_Columbia_Fraser	Review/ MetaAnalysis	O. nerka	Spawning, Upmigration	Disease, Temperature_FW	Behaviour, Mortality	Species_interactions, Environment,	Dispersal, Demography
699	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Freshwater_habitat, Population	Density_Food, Habitat	Population_resilience, Productivity	Species_interactions, Environment,	Demography
700	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	Other_fish	Freshwater_habitat, Juvenile	Flow, Invasives, Management, Temperature_FW	Habitat_Distribution, Productivity	Species_interactions, Environment, , Management	Dispersal, Demography
701	10plus	British_Columbia	British_Columbia_not_Fraser	Field/ RemoteSensing	Other_species	Marine	Climate_indices, Ecosystem, Environment, Predators	Productivity	Species_interactions, Environment,	Demography
702	NA	Northwest	Northwest_Columbia	Theoretical/ Opinion	Salmonid_general	Freshwater_habitat	Management, Restoration	Genetics_Adaptation	, Management	Evolution*
703	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
704	1	Europe	NA	Field/ RemoteSensing	S. trutta	Upmigration	Environment, Temperature_FW	Phenology	Environment,	Demography
705	6to10	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing	O. mykiss	Juvenile	Density_Food, Flow, Management	Habitat_Distribution	Species_interactions, Environment, , Management	Dispersal
706	2to5	California	California_N	Field/ RemoteSensing	O. mykiss	General	NA	Behaviour, Life_history, Maturation, Productivity		Dispersal, Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
707	NA	NA	NA	Review/ MetaAnalysis	Salmonid_ general	Freshwater_ha bitat, Outmigration	Contaminants, Disease, Habitat, Management	NA	Species_interactions, Environment, , Management	NA
708	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile	Acidity	Physiology_Condition	Environment, ,	Physiology
709	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile	Acidity, Contaminants	Physiology_Condition	Environment, ,	Physiology
710	NA	Alaska	Alaska_W	Model, Projections/ ecosystem	General	General	Ecosystem, Fisheries, Management	Livelihood, Population_resilience, Productivity	Species_interactions, , Management	Demography, Management
711	2to5	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile	Density_Food, Habitat, Management	Growth, Mortality	Species_interactions, Environment, , Management	Demography, Physiology
712	6to10	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. tshawytscha	Juvenile, Marine	Flow, Management, Temperature_ FW	Carryover, Mortality	Environment, , Management	Demography
713	NA	British_Colum bia	British_Columb ia_Fraser	Model	O. nerka	Population	Fisheries, Management, Methods	Productivity	, Management	Demography
714	1	Japan	NA	Field/ RemoteSensing	O. keta	Marine, Outmigration	Management, Temperature_ marine	Growth, Mortality	Environment, , Management	Demography, Physiology
715	10plus	Japan	NA	Field/ RemoteSensing	O. keta	Marine	Temperature_ FW, Temperature_ marine	Growth, Mortality	Environment, ,	Demography, Physiology
716	NA	Northwest	Northwest_Col umbia	Model, Projections/ salmon	O. tshawytscha	Population	Flow, Habitat, Management, Temperature_ FW	Mortality, Population_resilience	Environment, , Management	Demography
717	1	Europe	NA	Field/ RemoteSensing	S. salar	Outmigration	Flow, Habitat, Management	Mortality	Environment, , Management	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
718	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Population	Density_Food, Flow, Temperature_ FW, Temperature_ marine	Productivity	Species_interactions, Environment,	Demography
719	NA	NA	NA	Review/ MetaAnalysis	General	General	Acidity, Contaminants, Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
720	NA	Japan	NA	Model	O. masou	Evolution, Juvenile, Spawning	Density_Food, Temperature_ FW	Genetics_Adaptation, Life_history, Maturation	Species_interactions, Environment,	Demography, Evolution, Physiology
721	2to5	Europe	NA	Field/ RemoteSensing	S. salar	General	Genetics, Habitat, Temperature_ marine	Habitat_Distribution, Population_resilience	Evolution, Environment,	Dispersal, Demography
722	1	Mountain_west	NA	Lab/ Experimental	Other_species	Juvenile	Density_Food, Genetics, Temperature_ FW	NA	Species_interactions, Evolution*, Environment,	NA
723	1	Asia_other	NA	Lab/ Experimental	O. mykiss	Juvenile	Dissolved_oxygen	Physiology_Condition	Environment,	Physiology
724	2to5	British_Columbia	British_Columbia_not_Fraser	Lab/ Experimental	O. tshawytscha	Evolution	Dissolved_oxygen, Temperature_ FW	Physiology_Condition	Environment,	Physiology
725	10plus	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. nerka	Juvenile	Density_Food, Prey, Temperature_ FW	Growth, Phenology	Species_interactions, Environment,	Demography, Physiology
726	NA	California, Northwest	NA	Model, Projections/ physical	General	Marine	Acidity, Dissolved_oxygen, Ecosystem, Temperature_ marine	NA	Species_interactions, Environment,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
727	NA	Europe	NA	Model	General	Marine	Ecosystem, Environment, Fisheries, Management	NA	Species_interactions, Environment, , Management	NA
728	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	S. confluentus, S. fontinalis	Freshwater_habitat, Juvenile	Invasives, Temperature_FW	Habitat_Distribution	Species_interactions, Environment,	Dispersal
729	2to5	Europe	NA	Field/RemoteSensing	S. salar, S. trutta	Freshwater_habitat	Habitat, Temperature_FW	NA	Environment,	NA
730	NA	California, Northwest	California_N, Northwest_Columbia	Model	O. mykiss, O. tshawytscha	Population, Upmigration	Management, Methods, Temperature_FW	Mortality, Population_resilience	Environment, , Management	Demography
731	1	California	California_S	Field/RemoteSensing	O. mykiss	Juvenile	Acidity, Dissolved_oxygen, Habitat, Temperature_FW	Behaviour, Habitat_Distribution	Environment,	Dispersal
732	NA	NA	NA	Model, Theoretical/Opinion	General	Juvenile	Density_Food, Temperature_FW	Growth, Physiology_Condition	Species_interactions, Environment,	Physiology
733	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss, O. tshawytscha	Juvenile	Habitat, Management	Mortality	Environment, , Management	Demography
734	2to5	Northwest	Northwest_Columbia, Northwest_Columbia	Field/RemoteSensing	General	Juvenile	Invasives, Predators	Habitat_Distribution	Species_interactions,	Dispersal
735	2to5	Alaska	Alaska_W	Field/RemoteSensing	Other_fish	Freshwater_habitat	Habitat	Habitat_Distribution	Environment,	Dispersal
736	1	Europe	NA	Field/RemoteSensing	S. salar	Outmigration	Methods	Phenology, Physiology_Condition		Demography, Physiology
737	NA	NA	NA	Model	General	Juvenile, Population	Density_Food, Flow, Temperature_FW	Productivity	Species_interactions, Environment,	Demography
738	1	Alaska	Alaska_W	Field/RemoteSensing	O. tshawytscha	Juvenile	Density_Food, Habitat, Prey	Growth, Habitat_Distribution	Species_interactions, Environment,	Dispersal, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
739	10plus	Alaska	Alaska_W	Field/ RemoteSensing	O. tshawytscha	Spawning	Density_Food	Behaviour, Habitat_Distribution	Species_interactions,	Dispersal
740	NA	Largescale	NA	Field/ RemoteSensing	S. salar	Marine	Disease, Temperature_ marine	NA	Species_interactions,	NA Environment,
741	2to5	Northwest	Northwest_Co astal, Northwest_Pu get_Sound	Lab/ Experimental	Other_fish	Marine	Acidity	Growth, Phenology	Environment,	Demography, Physiology
742	2to5	Alaska	Alaska_S	Field/ RemoteSensing	Other_fish	Juvenile, Marine	Genetics, Temperature_ FW	Growth	Evolution, Environment,	Physiology
743	NA	Largescale	NA	Review/ MetaAnalysis	General	Marine	Acidity, Ecosystem, Environment, Fisheries, Management, Temperature_ marine	NA	Species_interactions,	NA Environment, , Management
744	10plus	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. tshawytscha	Upmigration	Temperature_ marine	Productivity	Environment,	Demography
745	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Marine, Population	Climate_indice s	Productivity	Environment,	Demography
746	1	Europe	NA	Lab/ Experimental	S. salar	Marine	NA	Performance, Physiology_Condition		Physiology
747	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Egg, Juvenile	Flow	Mortality, Productivity	Environment,	Demography
748	2to5	California	California_N	Field/ RemoteSensing	O. kisutch, O. mykiss	Juvenile	Flow	Mortality	Environment,	Demography
749	10plus	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. nerka	Juvenile	Density_Food, Ecosystem, Prey	Growth, Productivity	Species_interactions,	Demography, Physiology
750	1	East_North_A merica	NA	Lab/ Experimental	S. salar	Marine	Temperature_ FW	Mortality, Physiology_Condition	Environment,	Demography, Physiology
751	2to5	Europe	NA	Field/ RemoteSensing	Salmonid_ general	Juvenile	Habitat, Temperature_ FW	NA	Environment,	NA
752	1	Japan	NA	Lab/ Experimental	O. mykiss	Evolution	Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
753	1	Japan	NA	Lab/ Experimental	O. mykiss	Juvenile	Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
754	NA	Largescale	NA	Review/ MetaAnalysis	General	Freshwater_ha bitat, General, Marine	Management	NA	, Management	NA
755	10plus	Largescale	NA	Field/ RemoteSensing	O. gorbuscha	Marine, Population	Density_Food	Productivity	Species_interactions,	Demography
756	10plus	Northwest	Northwest_Col umbia	Field/ RemoteSensing	General	Freshwater_ha bitat	Temperature_ FW	Habitat_Distribution	Environment,	Dispersal
757	10plus	Mountain_we st	NA	Field/ RemoteSensing, Model, Review/ MetaAnalysis	O. clarkii, O. mykiss, S. confluentus	General	Flow, Temperature_ FW	Habitat_Distribution	Environment,	Dispersal
758	10plus	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. mykiss, S. confluentus	Freshwater_ha bitat	Habitat, Temperature_ FW	Habitat_Distribution	Environment,	Dispersal
759	10plus	Northwest	California_N, Northwest_Co astal, Northwest_Col umbia	Field/ RemoteSensing, Projections/ salmon	O. mykiss, O. nerka, S. trutta	Spawning, Upmigration	Temperature_ FW	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
760	10plus	Mountain_we st, Northwest	Northwest_Co astal, Northwest_Col umbia	Field/ RemoteSensing	Salmonid_ general	Freshwater_ha bitat	Temperature_ FW	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
761	NA	Northwest	Northwest_Col umbia	Theoretical/ Opinion	O. mykiss, O. nerka, O. tshawytscha	Juvenile, Outmigration	Habitat, Management	Mortality, Performance	Environment, , Management	Demography, Physiology
762	NA	NA	NA	Review/ MetaAnalysis	General	Juvenile	Temperature_ FW, Temperature_ marine	Growth, Physiology_Condition	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
763	1	East_North_America	NA	Field/RemoteSensing	Other_fish	Marine	Dissolved_oxygen, Predators, Temperature_FW, Temperature_marine	Habitat_Distribution	Species_interactions, Environment,	Dispersal
764	NA	Largescale	NA	Review/MetaAnalysis	General	Juvenile, Marine, Upmigration	Acidity, Contaminants	NA	Environment,	NA
765	2to5	Europe	NA	Model	General	Freshwater_habitat	Habitat, Temperature_FW	NA	Environment,	NA
766	2to5	Europe	NA	Model	S. salar	Freshwater_habitat	Temperature_FW	NA	Environment,	NA
767	NA	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	General	Fisheries	Livelihood	, Management	Management
768	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing, Model, Projections/salmon	O. tshawytscha	Spawning	Density_Food, Environment, Flow, Habitat, Temperature_FW	Habitat_Distribution	Species_interactions, Environment,	Dispersal
769	10plus	Europe	NA	Field/RemoteSensing	S. salar	Marine, Population	Fisheries	Habitat_Distribution, Mortality, Productivity	, Management	Dispersal, Demography
770	NA	British_Columbia, California, East_North_America, Northwest	NA	Review/MetaAnalysis	General	Marine	Ecosystem, Methods	NA	Species_interactions,	NA
771	10plus	Northwest	Northwest_Columbia, Northwest_Columbia	Model, Projections/physical	General, Salmonid_general	Freshwater_habitat	Flow, Management, Temperature_FW	NA	Environment, , Management	NA
772	NA	Alaska	Alaska_S	Model	O. gorbuscha, O. keta, O. kisutch	Juvenile	Habitat, Invasives, Predators	Habitat_Distribution, Mortality, Population_resilience	Species_interactions, Environment,	Dispersal, Demography



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
773	1	Europe	NA	Lab/ Experimental	Other_fish	Egg, Spawning	Genetics, Temperature_ FW	Carryover, Morphology, Mortality	Evolution, Environment,	Demography, Physiology
774	NA	NA	NA	Model, Theoretical/ Opinion	General	Marine	Fisheries, Management, Methods	NA	, Management	NA
775	NA	Europe	NA	Field/ RemoteSensing	S. trutta	Evolution, Juvenile, Upmigration	Habitat, Temperature_ FW	Genetics_Adaptation, Physiology_Condition	Environment,	Evolution*, Physiology
776	2to5	California	California_S	Field/ RemoteSensing	O. mykiss	Juvenile	Methods, Predators	Mortality	Species_interactions,	Demography
777	1	California	California_N	Field/ RemoteSensing	O. kisutch, O. tshawytscha, Salmonid_ general	Juvenile	Disease, Flow, Management, Temperature_ FW	NA	Species_interactions, Environment, , Management	NA
778	1	California	California_CV	Field/ RemoteSensing, Lab/ Experimental	O. tshawytscha	Juvenile	Density_Food, Ecosystem, Environment, Habitat, Temperature_ FW	Growth	Species_interactions, Environment,	Physiology
779	10plus	Largescale	NA	Field/ RemoteSensing	O. gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha	Population	Climate_indice s, Density_Food, Fisheries	Growth, Maturation	Species_interactions, Environment, , Management	Physiology
780	2to5	British_Columbia	British_Columbia_Fraser	Lab/ Experimental	O. gorbuscha, O. nerka	Upmigration	Temperature_ FW	Maturation, Mortality, Physiology_Condition	Environment,	Demography, Physiology
781	1	British_Columbia	British_Columbia_Fraser	Lab/ Experimental	O. gorbuscha, O. nerka	Upmigration	Temperature_ FW	Physiology_Condition	Environment,	Physiology
782	1	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing, Lab/ Experimental	O. nerka	Upmigration	Temperature_ FW	Mortality, Physiology_Condition	Environment,	Demography, Physiology
783	1	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. clarkii	Juvenile	Density_Food, Habitat, Temperature_ FW	Growth	Species_interactions, Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
784	10plus	Europe	NA	Field/ RemoteSensing	Other_fish, S. trutta	Marine	Temperature_ FW, Temperature_ marine	Growth, Mortality, Phenology	Environment,	Demography, Physiology
785	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Marine	Climate_indice s, Temperature_ marine	Growth	Environment,	Physiology
786	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Marine	Genetics	Habitat_Distribution	Evolution,	Dispersal
787	6to10	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Upmigration	Fisheries, Management	Phenology	, Management	Demography
788	6to10	Europe	NA	Field/ RemoteSensing	S. trutta	Juvenile	Flow	Productivity	Environment,	Demography
789	NA	British_Columbia	British_Columbia_not_Fraser	Review/ MetaAnalysis	General, O. tshawytscha	Marine	Acidity, Ecosystem, Environment, Prey	NA	Species_interactions, Environment,	NA
790	1	East_North_America	NA	Lab/ Experimental	O. mykiss	Juvenile	Density_Food, Flow	Growth, Performance, Physiology_Condition	Species_interactions, Environment,	Physiology
791	10plus	California	California_N	Field/ RemoteSensing	Other_species	Marine	Ecosystem, Environment, Predators, Temperature_ marine	Productivity	Species_interactions, Environment,	Demography
792	2to5	Northwest	Northwest_Coastal	Field/ RemoteSensing	Other_species	Marine	Acidity, Dissolved_oxygen, Ecosystem, Environment	Habitat_Distribution	Species_interactions, Environment,	Dispersal
793	6to10	Alaska	Alaska_S, Alaska_SE	Field/ RemoteSensing	Salmonid_ general	Freshwater_habitat, General	Fisheries, Habitat	NA	Environment, , Management	NA
794	NA	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Evolution	Genetics	Genetics_Adaptation	Evolution,	Evolution
795	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. clarkii	Evolution	Habitat	Genetics_Adaptation, Life_history	Environment,	Demography, Evolution
796	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Population	Climate_indices	Growth, Maturation	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
797	10plus	Alaska	Alaska_W	Field/ RemoteSensing	O. nerka	Marine	Climate_indice s, Density_Food, Prey	Productivity	Species_interactions, Environment,	Demography
798	NA	NA	NA	Theoretical/ Opinion	General	Freshwater_ha bitat	Habitat, Methods, Temperature_ FW	NA	Environment,	NA
799	1	East_North_A merica	NA	Lab/ Experimental	O. mykiss	Juvenile	Temperature_ FW	Physiology_Condition	Environment,	Physiology
800	1	East_North_A merica	NA	Lab/ Experimental	S. salar	Juvenile	Temperature_ FW	Growth, Immune, Physiology_Condition	Environment,	Physiology
801	NA	California, Northwest	NA	Field/ RemoteSensing, Model	General	Freshwater_ha bitat	Flow, Habitat	NA	Environment,	NA
802	10plus	Alaska	Alaska_S	Field/ RemoteSensing	O. tshawytscha	General, Population	Climate_indice s, Environment, Flow, Temperature_ FW	Productivity	Environment,	Demography
803	NA	Northwest	Northwest_Co astal	Model	O. kisutch, O. mykiss, O. tshawytscha	Freshwater_ha bitat, Population	Flow, Habitat, Restoration, Temperature_ FW	Habitat_Distribution, Mortality, Productivity	Environment, , Management	Dispersal, Demography
804	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Juvenile	Acidity, Ecosystem	Habitat_Distribution	Species_interactions, Environment,	Dispersal
805	10plus	Mountain_we st	NA	Field/ RemoteSensing, Model	O. clarkii	Population	Ecosystem, Environment, Temperature_ FW	Life_history, Productivity	Species_interactions, Environment,	Demography
806	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Marine, Population	Temperature_ marine	Habitat_Distribution, Maturation	Environment,	Dispersal, Physiology
807	2to5	Europe	NA	Field/ RemoteSensing	S. trutta	Outmigration	Predators	Mortality	Species_interactions,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
808	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	Other_fish	Juvenile, Marine	Ecosystem, Environment, Habitat, Prey, Temperature_marine	Habitat_Distribution, Phenology	Species_interactions, Environment,	Dispersal, Demography
809	6to10	Europe	NA	Field/RemoteSensing	S. salar	Marine	Dissolved_oxygen, Ecosystem, Temperature_marine	Carryover, Growth, Mortality	Species_interactions, Environment,	Demography, Physiology
810	2to5	California	California_N	Lab/Experimental	O. mykiss	Population	Genetics	Genetics_Adaptation, Population_resilience	Evolution,	Demography, Evolution
811	10plus	East_North_America	NA	Field/RemoteSensing, Model, Projections/salmon	O. mykiss, O. tshawytscha, Other_fish	Juvenile, Marine	Density_Food, Prey, Temperature_FW	Growth, Physiology_Condition	Species_interactions, Environment,	Physiology
812	NA	California, Northwest	California_N, California_S, Northwest_Coastal	Model	Other_fish	Marine	Density_Food, Ecosystem	NA	Species_interactions,	NA
813	NA	NA	NA	Model	General	Population	Genetics	Genetics_Adaptation, Population_resilience	Evolution,	Demography, Evolution
814	NA	NA	NA	Theoretical/Opinion	General	Population	Genetics, Management	Genetics_Adaptation	Evolution, , Management	Evolution
815	1	Europe	NA	Field/RemoteSensing	S. salar	Outmigration	Habitat, Management	Behaviour, Mortality	Environment, , Management	Dispersal, Demography
816	NA	California	California_N, California_S	Theoretical/Opinion	Salmonid_general	General, Population	Habitat, Management	Population_resilience	Environment, , Management	Demography
817	1	Europe	NA	Lab/Experimental	Other_fish	Egg, Evolution	Genetics, Habitat	Genetics_Adaptation, Growth, Physiology_Condition	Evolution, Environment,	Evolution, Physiology
818	2to5	Largescale	NA	Lab/Experimental	Other_species	Marine	Acidity	Physiology_Condition	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
819	1	Northwest	Northwest_Columbia	Field/RemoteSensing	O. clarkii	Juvenile	Density_Food, Habitat, Management, Predators, Prey, Restoration	Productivity	Species_interactions, Environment, , Management	Demography
820	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. clarkii	Juvenile	Flow, Temperature_FW	Growth, Physiology_Condition, Productivity	Environment,	Demography, Physiology
821	1	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Juvenile	Environment, Habitat, Temperature_FW	Growth, Habitat_Distribution, Phenology	Environment,	Dispersal, Demography, Physiology
822	2to5	East_North_America	NA	Field/RemoteSensing	S. fontinalis	Juvenile	Habitat, Temperature_FW	Growth	Environment,	Physiology
823	NA	NA	NA	Review/MetaAnalysis	General	Marine	Ecosystem, Fisheries, Methods	NA	Species_interactions, , Management	NA
824	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss, O. tshawytscha	Upmigration	Temperature_FW	Behaviour, Habitat_Distribution	Environment,	Dispersal
825	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Spawning, Upmigration	Contaminants	Mortality	Environment,	Demography
826	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Spawning, Upmigration	Management, Temperature_FW	Mortality	Environment, , Management	Demography
827	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Upmigration	Fisheries, Flow, Predators, Temperature_FW	Mortality	Species_interactions, Environment, , Management	Demography
828	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss, O. tshawytscha	Upmigration	Habitat, Temperature_FW	Behaviour, Habitat_Distribution, Phenology	Environment,	Dispersal, Demography
829	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Juvenile, Spawning, Upmigration	Habitat, Temperature_FW	Behaviour, Habitat_Distribution	Environment,	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
830	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Upmigration	Temperature_FW	Behaviour, Habitat_Distribution, Physiology_Condition	Environment,	Dispersal, Physiology
831	1	East_North_America	NA	Lab/Experimental	O. mykiss	Marine	Disease, Temperature_FW	Performance, Physiology_Condition	Species_interactions, Environment,	Physiology
832	1	Europe	NA	Field/RemoteSensing	O. mykiss	Juvenile	Temperature_FW	Physiology_Condition	Environment,	Physiology
833	NA	NA	NA	Review/MetaAnalysis	General	Marine	Acidity	Genetics_Adaptation, Physiology_Condition, Population_resilience	Environment,	Demography, Evolution, Physiology
834	2to5	NA	NA	Field/RemoteSensing, Lab/Experimental	Other_species	Marine	Acidity	Genetics_Adaptation	Environment,	Evolution
835	10plus	Europe	NA	Field/RemoteSensing	Other_fish	Egg, Population	Temperature_FW	Mortality, Performance, Population_resilience	Environment,	Demography, Physiology
836	2to5	California	California_N	Field/RemoteSensing	O. mykiss	Juvenile, Outmigration	Flow, Habitat	Growth, Habitat_Distribution, Phenology	Environment,	Dispersal, Demography, Physiology
837	2to5	California	California_N	Field/RemoteSensing	O. mykiss	Population	Flow, Genetics, Habitat	Genetics_Adaptation	Evolution, Environment,	Evolution
838	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. gorbuscha, O. tshawytscha	Marine	Density_Food	Mortality	Species_interactions,	Demography
839	2to5	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. keta, O. tshawytscha	Marine, Outmigration	Density_Food, Habitat, Prey	Diet, Habitat_Distribution	Species_interactions, Environment,	Species_interactions, Dispersal
840	10plus	Europe	NA	Field/RemoteSensing	S. salar	Juvenile, Outmigration	Temperature_FW	Carryover, Maturation, Mortality, Phenology	Environment,	Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
841	NA	British_Columbia, Northwest	British_Columbia_not_Fraser, Northwest_Puget_Sound	Model, Projections/ecosystem	Other_species	Marine	Density_Food, Dissolved_oxygen, Ecosystem, Temperature_FW, Temperature_marine	NA	Species_interactions, Environment,	NA
842	2to5	British_Columbia, Northwest	British_Columbia_not_Fraser, Northwest_Puget_Sound	Field/RemoteSensing	General	Marine	Acidity, Dissolved_oxygen, Environment, Temperature_marine	NA	Environment,	NA
843	NA	Northwest	Northwest_Puget_Sound	Model, Projections/physical	General	Marine	Acidity, Dissolved_oxygen, Habitat, Temperature_marine	NA	Environment,	NA
844	10plus	Largescale	NA	Field/RemoteSensing	O. kisutch, O. tshawytscha	Marine	Climate_indices	Mortality	Environment,	Demography
845	10plus	Largescale	NA	Field/RemoteSensing	O. tshawytscha	Marine	Temperature_marine	Habitat_Distribution, Mortality	Environment,	Dispersal, Demography
846	1	Europe	NA	Field/RemoteSensing	S. trutta	Population	Contaminants, Genetics	Population_resilience	Evolution, Environment,	Demography
847	NA	Russia	NA	Field/RemoteSensing	O. kisutch	Freshwater_habitat, General	Habitat	Habitat_Distribution	Environment,	Dispersal
848	10plus	Japan	NA	Field/RemoteSensing, Model	O. keta	Marine	Density_Food, Temperature_marine	Growth	Species_interactions, Environment,	Physiology
849	NA	Largescale	NA	Review/MetaAnalysis	O. keta	Marine, Population	Genetics	Genetics_Adaptation, Habitat_Distribution	Evolution,	Dispersal, Evolution
850	1	East_North_America	NA	Lab/Experimental	O. mykiss	General, Upmigration	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
851	1	Europe	NA	Field/RemoteSensing	S. salar	Outmigration	Contaminants, Predators	Behaviour, Mortality	Species_interactions, Environment,	Dispersal, Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
852	1	Northwest	Northwest_Columbia	Lab/Experimental	O. mykiss	Spawning, Upmigration	Disease, Temperature_FW	Performance	Species_interactions, Environment,	Physiology
853	NA	Northwest	Northwest_Columbia	Review/MetaAnalysis	O. kisutch, O. mykiss, O. nerka, O. tshawytscha, Salmonid_general	Population, Upmigration	Habitat, Management	Productivity	Environment, , Management	Demography
854	1	Northwest	Northwest_Columbia	Field/RemoteSensing	O. nerka	Spawning	Habitat, Management	Behaviour, Habitat_Distribution, Mortality	Environment, , Management	Dispersal, Demography
855	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing, Projections/salmon	O. kisutch	Juvenile	Flow, Management	Behaviour	Environment, , Management	Dispersal
856	2to5	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. kisutch	Population	NA	Genetics_Adaptation, Growth, Maturation, Morphology, Phenology		Demography, Evolution, Physiology
857	1	Mountain_west	NA	Lab/Experimental	O. mykiss	Juvenile, Upmigration	Disease, Predators	NA	Species_interactions, NA	
858	NA	NA	NA	Projections/ecosystem, Review/MetaAnalysis	Other_fish	Marine	Acidity, Ecosystem, Prey, Temperature_marine	NA	Species_interactions, Environment,	NA
859	10plus	Alaska	Alaska_SE	Field/RemoteSensing	O. keta	Marine	Climate_indices, Environment, Temperature_marine	NA	Environment,	NA
860	6to10	California	Northwest_Columbia	Field/RemoteSensing	General	Freshwater_habitat	Environment, Temperature_FW	NA	Environment,	NA
861	2to5	Mountain_west	NA	Field/RemoteSensing	O. mykiss	Juvenile	Environment, Prey, Temperature_FW	Growth, Productivity	Species_interactions, Environment,	Demography, Physiology



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
862	NA	Largescale	NA	Theoretical/ Opinion	General	Marine	Fisheries, Management	NA	, Management	NA
863	10plus	Alaska	Alaska_SE	Field/ RemoteSensing	O. gorbuscha	Upmigration	Genetics	Genetics_Adaptation, Phenology	Evolution,	Demography, Evolution
864	10plus	Alaska	Alaska_SE	Field/ RemoteSensing	O. gorbuscha	Upmigration	Genetics	Genetics_Adaptation, Phenology	Evolution,	Demography, Evolution
865	NA	Northwest	Northwest_Columbia	Field/ RemoteSensing	S. confluentus	Evolution	Flow, Habitat, Temperature_ FW	Genetics_Adaptation, Population_resilience	Environment,	Demography, Evolution
866	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	Salmonid_ general	Juvenile	Habitat, Management	Population_resilience	Environment, , Management	Demography
867	10plus	Alaska	Alaska_SE	Field/ RemoteSensing	O. clarkii, O. gorbuscha, O. kisutch, O. nerka, S. malma	Population, Upmigration	Climate_indice s, Flow, Temperature_ FW, Temperature_ marine	Phenology	Environment,	Demography
868	10plus	Alaska	Alaska_SE	Field/ RemoteSensing	O. kisutch, O. nerka	Juvenile	Density_Food, Temperature_ FW	Growth, Productivity	Species_interactions, Environment,	Demography, Physiology
869	10plus	Alaska	Alaska_SE	Field/ RemoteSensing	O. gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha	Upmigration	Climate_indice s, Flow, Temperature_ marine	Phenology	Environment,	Demography
870	NA	NA	NA	Review/ MetaAnalysis	O. clarkii, O. mykiss, S. confluentus, S. fontinalis, S. trutta	General, Population	Temperature_ FW	Physiology_Condition, Population_resilience	Environment,	Demography, Physiology
871	NA	Mountain_west	NA	Model	O. clarkii	Freshwater_habitat	Habitat, Management, Restoration	Habitat_Distribution	Environment, , Management	Dispersal
872	1	British_Columbia	British_Columbia_Fraser	Lab/ Experimental	O. kisutch	Upmigration	Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
873	2to5	Mountain_west	NA	Field/ RemoteSensing, Lab/ Experimental	S. fontinalis	Juvenile	Flow	Behaviour, Physiology_Condition	Environment,	Dispersal, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
874	NA	British_Columbia	British_Columbia_not_Fraser	Review/ MetaAnalysis	Salmonid_general	Juvenile, Marine, Upmigration	Contaminants, Density_Food, Management, Predators, Temperature_FW	Mortality	Species_interactions, Environment, Management	Demography
875	NA	NA	NA	Review/ MetaAnalysis	General	Marine	Acidity, Ecosystem, Temperature_marine	Physiology_Condition	Species_interactions, Environment,	Physiology
876	NA	NA	NA	Review/ MetaAnalysis	General	Marine	Acidity	Physiology_Condition	Environment,	Physiology
877	10plus	Northwest	Northwest_Coastal, Northwest_Columbia	Field/ RemoteSensing	General	Freshwater_habitat	Habitat, Temperature_FW	Habitat_Distribution	Environment,	Dispersal
878	NA	Northwest	Northwest_Columbia	Field/ RemoteSensing, Model	Salmonid_general	Juvenile, Outmigration	Habitat, Restoration	Population_resilience	Environment, Management	Demography
879	10plus	Europe	NA	Field/ RemoteSensing	Other_fish, Salmonid_general	Population	Temperature_FW	Mortality, Phenology	Environment,	Demography
880	1	Northwest	Northwest_Columbia	Lab/ Experimental	O. tshawytscha	Juvenile	Predators, Temperature_FW	Behaviour, Growth, Mortality, Physiology_Condition	Species_interactions, Environment,	Dispersal, Demography, Physiology
881	NA	Japan	NA	Lab/ Experimental	Other_species	Marine	Acidity	NA	Environment,	NA
882	1	Japan	NA	Lab/ Experimental	Other_species	Marine	Acidity	Mortality, Productivity	Environment,	Demography
883	1	Japan	NA	Lab/ Experimental	Other_species	Marine	Acidity	Physiology_Condition	Environment,	Physiology
884	1	Japan	NA	Review/ MetaAnalysis	Other_species	Marine	Acidity	Physiology_Condition	Environment,	Physiology
885	NA	East_North_America	NA	Theoretical/ Opinion	General, S. salar	Freshwater_habitat	Habitat, Management, Restoration	NA	Environment, Management	NA
886	6to10	Russia	NA	Field/ RemoteSensing	O. mykiss	Upmigration	Temperature_marine	Life_history, Phenology	Environment,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
887	10plus	Russia	NA	Field/ RemoteSensing	O. mykiss	Population	Genetics	Genetics_Adaptation, Life_history	Evolution,	Demography, Evolution
888	10plus	Europe	NA	Field/ RemoteSensing	S. trutta	Juvenile, Population	Habitat, Invasives	Habitat_Distribution	Species_interactions, Environment,	Dispersal
889	1	Europe	NA	Lab/ Experimental	Other_species	Marine	Acidity, Contaminants	NA	Environment,	NA
890	2to5	East_North_America	NA	Field/ RemoteSensing	S. salar	Juvenile, Marine, Outmigration	Habitat, Temperature_marine	Behaviour, Habitat_Distribution	Environment,	Dispersal
891	2to5	East_North_America	NA	Field/ RemoteSensing	S. salar	Marine	Habitat, Temperature_marine	Behaviour, Habitat_Distribution	Environment,	Dispersal
892	1	Northwest	Northwest_Columbia	Lab/ Experimental	O. kisutch	Juvenile	Contaminants, Dissolved_oxygen, Temperature_FW	Physiology_Condition	Environment,	Physiology
893	6to10	Europe	NA	Field/ RemoteSensing, Lab/ Experimental	Other_fish	Egg	Temperature_FW	Phenology, Physiology_Condition	Environment,	Demography, Physiology
894	1	Europe	NA	Lab/ Experimental	Other_fish, S. trutta	Egg	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
895	NA	NA	NA	Model	General	General	Ecosystem, Methods	NA	Species_interactions,	NA
896	NA	Europe	NA	Theoretical/ Opinion	S. salar	General	Fisheries, Management	Livelihood	, Management	Management
897	2to5	Northwest	Northwest_Columbia, Northwest_Puget_Sound	Field/ RemoteSensing, Model	O. tshawytscha	Egg, Freshwater_habitat, Juvenile, Upmigration	Contaminants, Dissolved_oxygen, Temperature_FW	Population_resilience	Environment,	Demography
898	NA	California	California_CV	Model	General	Freshwater_habitat	Environment, Flow, Habitat, Methods	NA	Environment,	NA
899	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Egg, Spawning	Flow, Management	Productivity	Environment, , Management	Demography
900	1	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	General	Genetics, Methods	Habitat_Distribution	Evolution*,	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
901	6to10	Europe	NA	Field/ RemoteSensing	S. trutta	Population	Density_Food, Habitat, Temperature_ FW	Productivity	Species_interactions, Environment,	Demography
902	NA	Europe	NA	Field/ RemoteSensing	S. trutta	General	Flow, Management	Habitat_Distribution	Environment, , Management	Dispersal
903	2to5	East_North_A merica	NA	Field/ RemoteSensing	S. salar	Outmigration	Habitat	Habitat_Distribution, Mortality	Environment,	Dispersal, Demography
904	2to5	California	California_CV	Field/ RemoteSensing, Model	O. tshawytscha	Juvenile	Habitat, Methods, Restoration	Mortality	Environment, , Management	Demography
905	6to10	California	California_N	Field/ RemoteSensing	O. kisutch	Juvenile	Flow, Habitat, Temperature_ FW	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
906	10plus	Alaska	Alaska_W	Field/ RemoteSensing	O. nerka	Evolution, Upmigration	Disease, Genetics	Genetics_Adaptation	Species_interactions, Evolution,	Evolution
907	1	Europe	NA	Field/ RemoteSensing	S. salar, S. trutta	Juvenile	Disease, Flow, Temperature_ FW	Immune, Mortality	Species_interactions, Environment,	Demography, Physiology
908	2to5	East_North_A merica	NA	Field/ RemoteSensing	S. salar	Egg	Dissolved_oxyg en, Environment, Flow, Habitat, Temperature_ FW	Mortality	Environment,	Demography
909	2to5	Northwest	Northwest_Col umbia	Field/ RemoteSensing, Model, Projections/ salmon	O. tshawytscha	Juvenile	Management, Restoration, Temperature_ FW	Habitat_Distribution, Population_resilience	Environment, , Management	Dispersal, Demography
910	2to5	Northwest	Northwest_Col umbia	Field/ RemoteSensing, Model	O. tshawytscha	Juvenile	Invasives, Predators, Temperature_ FW	Habitat_Distribution, Physiology_Condition	Species_interactions, Environment,	Dispersal, Physiology
911	2to5	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. tshawytscha	Juvenile	Invasives, Predators, Temperature_ FW	Habitat_Distribution	Species_interactions, Environment,	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
912	10plus	East_North_America	NA	Field/ RemoteSensing	Other_fish	Evolution, Population	Genetics	Genetics_Adaptation, Population_resilience, Productivity	Evolution,	Demography, Evolution
913	10plus	British_Columbia	British_Columbia_Fraser	Model	General	Freshwater_habitat	Temperature_ FW	NA	Environment,	NA
914	6to10	British_Columbia	British_Columbia_not_Fraser	Field/ RemoteSensing	O. clarkii	Juvenile	Habitat, Management, Temperature_ FW	Growth, Physiology_Condition	Environment, , Management	Physiology
915	1	Europe	NA	Lab/ Experimental	Other_fish	Egg, Juvenile	Temperature_ FW	Behaviour, Growth, Morphology	Environment,	Dispersal, Physiology
916	1	East_North_America	NA	Lab/ Experimental	O. mykiss	Evolution	Temperature_ FW	Physiology_Condition	Environment,	Physiology
917	NA	Europe	NA	Model	S. trutta	Juvenile	Density_Food, Habitat, Temperature_ FW	Growth, Productivity	Species_interactions, Environment,	Demography, Physiology
918	NA	NA	NA	Review/ MetaAnalysis	General	Marine	Acidity	Physiology_Condition	Environment,	Physiology
919	1	Asia_other	NA	Lab/ Experimental	O. keta	Outmigration	Environment, Genetics, Temperature_ FW	Physiology_Condition	Evolution, Environment,	Physiology
920	10plus	Northwest	Northwest_Coastal, Northwest_Puget_Sound	Field/ RemoteSensing, Projections/ physical	General	Freshwater_habitat	Habitat, Temperature_ FW	NA	Environment,	NA
921	1	Europe	NA	Lab/ Experimental	Other_fish	Juvenile	Temperature_ FW	Growth, Maturation	Environment,	Physiology
922	2to5	East_North_America	NA	Field/ RemoteSensing	S. salar	Juvenile, Outmigration	Temperature_ FW	Behaviour, Phenology	Environment,	Dispersal, Demography
923	NA	NA	NA	Review/ MetaAnalysis	General	General	Dissolved_oxygen, Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
924	2to5	East_North_America	NA	Field/ RemoteSensing	S. fontinalis	Population	Habitat, Management	Genetics_Adaptation	Environment, , Management	Evolution

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
925	NA	East_North_America, Europe	NA	Field/RemoteSensing, Review/MetaAnalysis	S. salar	Marine, Population	Genetics	Genetics_Adaptation	Evolution,	Evolution
926	NA	East_North_America, Europe	NA	Field/RemoteSensing	S. salar	Evolution, Population	Genetics	Population_resilience	Evolution,	Demography
927	10plus	Northwest	Northwest_Coastal, Northwest_Columbia	Model, Projections/physical	General	Freshwater_habitat	Flow, Habitat	NA	Environment,	NA
928	10plus	Europe	NA	Field/RemoteSensing	S. trutta	Juvenile, Marine	Temperature_FW, Temperature_marine	Growth	Environment,	Physiology
929	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. clarkii, S. confluentus	Freshwater_habitat, Population	Habitat, Temperature_FW	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
930	NA	East_North_America, Europe	NA	Review/MetaAnalysis	S. salar	Freshwater_habitat	Habitat, Management, Restoration	Population_resilience	Environment, , Management	Demography
931	1	Europe	NA	Field/RemoteSensing	S. salar	Upmigration	Temperature_FW	Behaviour, Performance, Physiology_Condition	Environment,	Dispersal, Physiology
932	2to5	Europe	NA	Field/RemoteSensing	S. trutta	Marine, Outmigration	Disease, Habitat	Behaviour, Habitat_Distribution, Physiology_Condition	Species_interactions, Environment,	Dispersal, Physiology
933	NA	NA	NA	Review/MetaAnalysis	Salmonid_general	Freshwater_habitat, Juvenile, Upmigration	Habitat	Habitat_Distribution, Life_history	Environment,	Dispersal, Demography
934	NA	Alaska	Alaska_S	Field/RemoteSensing, Model, Projections/salmon	O. kisutch	Population	Flow, Habitat, Temperature_FW	Productivity	Environment,	Demography
935	2to5	Alaska	Alaska_SE	Field/RemoteSensing	O. kisutch, O. nerka	Spawning	Flow, Management, Methods	NA	Environment, , Management	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
936	1	East_North_America	NA	Lab/Experimental	O. mykiss	Juvenile	Temperature_FW	Physiology_Condition	Environment,	Physiology
937	NA	Japan	NA	Model	Other_species	Marine	Environment, Genetics, Temperature_marine	Habitat_Distribution	Evolution, Environment,	Dispersal
938	1	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Upmigration	Flow, Management	Behaviour, Mortality	Environment, , Management	Dispersal, Demography
939	NA	Largescale	NA	Projections/physical	General	Marine	Climate_indices, Temperature_marine	NA	Environment,	NA
940	NA	NA	NA	Review/MetaAnalysis, Theoretical/Opinion	General	General, Outmigration, Upmigration	Genetics, Management	Genetics_Adaptation, Habitat_Distribution, Phenology	Evolution, , Management	Dispersal, Demography, Evolution
941	10plus	California	California_S	Field/RemoteSensing	Other_species	Marine	Climate_indices, Density_Food	Habitat_Distribution	Species_interactions, Environment,	Dispersal
942	2to5	East_North_America	NA	Lab/Experimental	O. tshawytscha	Egg	Temperature_FW	Carryover, Performance, Physiology_Condition	Environment,	Demography, Physiology
943	NA	British_Columbia, Largescale, Northwest	NA	Field/RemoteSensing	O. mykiss	Evolution	Habitat, Temperature_FW	Genetics_Adaptation, Immune	Environment,	Evolution, Physiology
944	1	British_Columbia	British_Columbia_Fraser	Lab/Experimental	O. nerka	Juvenile, Outmigration	Contaminants, Environment	Mortality, Physiology_Condition	Environment,	Demography, Physiology
945	1	British_Columbia	British_Columbia_not_Fraser	Lab/Experimental	O. gorbuscha	Outmigration	Contaminants, Environment, Temperature_marine	Mortality, Physiology_Condition	Environment,	Demography, Physiology
946	NA	Alaska	Alaska_W	Model	O. nerka	Upmigration	Fisheries, Habitat, Predators	Genetics_Adaptation, Morphology	Species_interactions, Environment, , Management	Evolution, Physiology
947	NA	California	California_CV	Model	O. mykiss, O. tshawytscha	Population	Management, Methods	Population_resilience	, Management	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
948	2to5	East_North_America	NA	Field/ RemoteSensing	S. salar	Juvenile	Environment, Flow, Temperature_ FW	Mortality	Environment,	Demography
949	1	Europe	NA	Field/ RemoteSensing, Lab/ Experimental	Other_species	Marine	Acidity	Mortality, Performance	Environment,	Demography, Physiology
950	1	NA	NA	Lab/ Experimental	Salmonid_ general	General	Management, Methods, Temperature_ FW	Growth	Environment, , Management	Physiology
951	1	British_Columbia	British_Columbia_Fraser	Lab/ Experimental	O. kisutch	Upmigration	Temperature_ FW	Mortality, Performance, Physiology_Condition	Environment,	Demography, Physiology
952	NA	NA	NA	Review/ MetaAnalysis	General	General	Temperature_ FW, Temperature_ marine	Physiology_Condition	Environment,	Physiology
953	2to5	Northwest	Northwest_Coastal, Northwest_Columbia	Field/ RemoteSensing, Model	O. tshawytscha	Marine	Density_Food, Prey, Temperature_ marine	Growth, Physiology_Condition	Species_interactions, Environment,	Physiology
954	10plus	Northwest	Northwest_Coastal, Northwest_Columbia	Field/ RemoteSensing	O. gorbuscha, O. keta	Marine	Climate_indices, Density_Food	Productivity	Species_interactions, Environment,	Demography
955	2to5	Northwest	Northwest_Coastal	Field/ RemoteSensing	Other_fish	Juvenile	Ecosystem, Environment, Prey, Temperature_ marine	Physiology_Condition	Species_interactions, Environment,	Physiology
956	10plus	Northwest	Northwest_Coastal, Northwest_Columbia	Field/ RemoteSensing	Other_fish, Other_species	Marine	Density_Food, Ecosystem, Environment, Temperature_ marine	Habitat_Distribution	Species_interactions, Environment,	Dispersal



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
957	10plus	Largescale	NA	Field/ RemoteSensing	Other_fish, Salmonid_ general	Marine	Environment, Fisheries, Prey, Temperature_ marine	NA	Species_interactions, Environment, , Management	NA
958	10plus	Largescale	NA	Field/ RemoteSensing	O. gorbuscha, O. keta, O. nerka	Marine	Temperature_ marine	Population_resilience, Productivity	Environment,	Demography
959	10plus	Alaska	Alaska_S, Alaska_SE	Field/ RemoteSensing	O. gorbuscha, O. keta, O. nerka, Salmonid_ general	Marine	Climate_indice s, Fisheries, Temperature_ marine	Productivity	Environment, , Management	Demography
960	10plus	Alaska	Alaska_S, Alaska_SE	Field/ RemoteSensing	General	Marine	Climate_indice s, Ecosystem, Temperature_ marine	NA	Species_interactions, Environment,	NA
961	10plus	Alaska, British_Colum bia, California, Largescale, Northwest	NA	Field/ RemoteSensing	General	Marine	Climate_indice s, Ecosystem, Environment, Temperature_ marine	NA	Species_interactions, Environment,	NA
962	10plus	Alaska, British_Colum bia	Alaska_S, Alaska_SE, British_Columb ia_not_Fraser	Field/ RemoteSensing	O. gorbuscha, O. kisutch, O. nerka	Marine	Climate_indice s, Environment, Temperature_ marine	Productivity	Environment,	Demography
963	1	Asia_other	NA	Lab/ Experimental	O. mykiss	Juvenile	Temperature_ FW	Physiology_Condition	Environment,	Physiology
964	NA	NA	NA	Review/ MetaAnalysis	General	Marine	Acidity, Ecosystem, Temperature_ marine	Growth, Habitat_Distribution, Mortality	Species_interactions, Environment,	Dispersal, Demography, Physiology
965	6to10	Alaska	Alaska_W	Field/ RemoteSensing	O. tshawytscha	Marine	NA	Habitat_Distribution		Dispersal
966	NA	NA	NA	Review/ MetaAnalysis	General	General, Juvenile, Upmigration	Disease	NA	Species_interactions,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
967	1	British_Columbia	British_Columbia_Fraser	Lab/Experimental	O. kisutch	Egg	Genetics, Temperature_FW	Growth, Physiology_Condition	Evolution, Environment,	Physiology
968	1	British_Columbia	British_Columbia_Fraser	Lab/Experimental	O. kisutch	Egg, Juvenile	Genetics, Temperature_FW	Growth, Physiology_Condition	Evolution, Environment,	Physiology
969	10plus	East_North_America	NA	Model	General	Juvenile	Flow	NA	Environment,	NA
970	1	East_North_America	NA	Lab/Experimental	General, Other_fish	Marine	Acidity, Predators	NA	Species_interactions, Environment,	NA
971	10plus	Northwest	Northwest_Coastal	Field/RemoteSensing	O. kisutch	Spawning, Upmigration	Flow, Temperature_FW	Behaviour, Phenology	Environment,	Dispersal, Demography
972	NA	California	California_N	Review/MetaAnalysis	General	Freshwater_habitat	Flow, Habitat, Temperature_FW	NA	Environment,	NA
973	1	California	California_N	Lab/Experimental	O. kisutch	Juvenile	Density_Food, Prey, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
974	1	East_North_America	NA	Lab/Experimental	S. salar	Upmigration	Disease, Temperature_FW	NA	Species_interactions, Environment,	NA
975	10plus	East_North_America	NA	Field/RemoteSensing	Other_fish	Spawning	Temperature_FW	Phenology	Environment,	Demography
976	10plus	Russia	NA	Field/RemoteSensing	O. gorbuscha	Marine	Temperature_FW, Temperature_marine	Phenology, Productivity	Environment,	Demography
977	10plus	Asia_other, Japan	NA	Field/RemoteSensing	General	Marine	Climate_indices, Ecosystem, Temperature_marine	NA	Species_interactions, Environment,	NA
978	10plus	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Upmigration	Flow, Management, Temperature_FW	Mortality	Environment, , Management	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
979	10plus	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Upmigration	Flow, Management, Temperature_FW	Mortality	Environment, , Management	Demography
980	2to5	Mountain_west	NA	Field/RemoteSensing, Projections/salmon	O. clarkii, Other_fish	Egg, Freshwater_habitat	Flow, Temperature_FW	Habitat_Distribution, Phenology	Environment,	Dispersal, Demography
981	10plus	California	California_CV	Field/RemoteSensing	O. tshawytscha	Marine, Outmigration	Habitat, Prey, Temperature_marine	Growth, Habitat_Distribution, Physiology_Condition	Species_interactions, Environment,	Dispersal, Physiology
982	10plus	Alaska, British_Columbia, Northwest	Alaska_S, Alaska_SE, British_Columbia_not_Fraser, Northwest_Coastal	Field/RemoteSensing	O. kisutch, Other_species	Marine	Prey, Temperature_marine	Habitat_Distribution	Species_interactions, Environment,	Dispersal
983	1	Australia_New Zealand	NA	Lab/Experimental	O. kisutch	Marine	Disease, Environment, Temperature_marine	Mortality	Species_interactions, Environment,	Demography
984	1	East_North_America	NA	Lab/Experimental	S. fontinalis	Juvenile	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
985	1	East_North_America	NA	Field/RemoteSensing	S. salar	Outmigration	Disease	Performance, Physiology_Condition	Species_interactions,	Physiology
986	1	Mountain_west	NA	Field/RemoteSensing, Lab/Experimental	O. mykiss	General, Juvenile	Density_Food, Invasives	NA	Species_interactions,	NA
987	NA	East_North_America	NA	Model, Review/MetaAnalysis	S. salar	Juvenile	Density_Food, Habitat, Temperature_FW	Growth, Physiology_Condition	Species_interactions, Environment,	Physiology
988	1	Mountain_west	NA	Lab/Experimental	O. clarkii, O. mykiss, S. fontinalis, S. trutta	Juvenile	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
989	NA	Largescale	NA	Review/ MetaAnalysis	General	Marine	Ecosystem, Fisheries, Temperature_ marine	Habitat_Distribution	Species_interactions, Environment, , Management	Dispersal
990	10plus	Largescale	NA	Field/ RemoteSensing	Salmonid_ general	Evolution	Genetics	Life_history	Evolution,	Demography
991	1	East_North_A merica	NA	Lab/ Experimental	S. salar	Juvenile, Outmigration	Dissolved_oxyg en, Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
992	10plus	East_North_A merica	NA	Field/ RemoteSensing	Other_fish	Population	Genetics, Temperature_ marine	Genetics_Adaptation, Habitat_Distribution, Population_resilience	Evolution, Environment,	Dispersal, Demography, Evolution
993	NA	California, Northwest	California_N, California_S, Northwest_Co astal	Model, Projections/ ecosystem	Other_species	Marine	Ecosystem, Environment	Habitat_Distribution, Productivity	Species_interactions, Environment,	Dispersal, Demography
994	1	Europe	NA	Lab/ Experimental	O. mykiss	Evolution	Genetics, Temperature_ FW	Life_history	Evolution, Environment,	Demography
995	10plus	California	California_CV	Field/ RemoteSensing	O. tshawytscha, Other_fish	Juvenile, Population	Flow	Productivity	Environment,	Demography
996	2to5	British_Colum bia	British_Columb ia_Fraser	Field/ RemoteSensing	O. nerka	Outmigration, Upmigration	Disease	NA	Species_interactions,	NA
997	NA	East_North_A merica	NA	Theoretical/ Opinion	S. salar	Freshwater_ha bitat	Flow, Management	Population_resilience	Environment, , Management	Demography
998	1	Mountain_we st	NA	Field/ RemoteSensing, Model	General, Other_species	Juvenile	Habitat, Temperature_ FW	NA	Environment,	NA
999	1	Europe	NA	Lab/ Experimental	O. mykiss, Other_fish, S. salar	Juvenile	Environment, Methods, Temperature_ FW	Behaviour	Environment,	Dispersal
1000	2to5	California	California_N	Field/ RemoteSensing	O. clarkii, O. kisutch, O. mykiss, O. tshawytscha	Juvenile, Upmigration	Disease, Flow, Habitat	NA	Species_interactions, Environment,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1001	1	Europe	NA	Field/ RemoteSensing, Lab/ Experimental	S. salar	Egg	Dissolved_oxygen, Flow	Mortality	Environment,	Demography
1002	10plus	Alaska, British_Columbia	Alaska_SE, Alaska_W, British_Columbia_Fraser, British_Columbia_not_Fraser	Field/ RemoteSensing	O. nerka	Marine	Climate_indices, Temperature_marine	Productivity	Environment,	Demography
1003	10plus	Largescale	NA	Field/ RemoteSensing	O. gorbuscha	Marine	NA	Productivity		Demography
1004	NA	NA	NA	Model, Theoretical/ Opinion	General	Evolution, Population	Ecosystem	Productivity	Species_interactions,	Demography
1005	NA	Northwest	Northwest_Columbia	Review/ MetaAnalysis	O. clarkii	Population	Management, Restoration	Population_resilience	, Management	Demography
1006	NA	Northwest	Northwest_Columbia	Theoretical/ Opinion	O. tshawytscha	Marine	Management, Predators	Mortality	Species_interactions, , Management	Demography
1007	1	Europe	NA	Lab/ Experimental	Other_fish	Marine	Acidity	Physiology_Condition	Environment,	Physiology
1008	1	Europe	NA	Lab/ Experimental	Other_fish	Marine	Acidity	Performance	Environment,	Physiology
1009	2to5	Alaska	Alaska_SE	Field/ RemoteSensing	O. gorbuscha	Juvenile, Marine, Outmigration	Temperature_marine	Genetics_Adaptation, Mortality, Phenology	Environment,	Demography, Evolution
1010	2to5	Alaska	Alaska_SE	Field/ RemoteSensing, Lab/ Experimental	O. gorbuscha	Upmigration	Genetics	Mortality, Phenology	Evolution,	Demography
1011	NA	California	California_N	Field/ RemoteSensing, Lab/ Experimental, Review/ MetaAnalysis	O. kisutch	Juvenile	Density_Food, Habitat, Temperature_FW	Growth	Species_interactions, Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1012	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Upmigration	NA	Behaviour, Mortality		Dispersal, Demography
1013	NA	Largescale	NA	Theoretical/Opinion	Salmonid_general	Marine	Climate_indices	Mortality	Environment,	Demography
1014	NA	Largescale	NA	Theoretical/Opinion	O. tshawytscha	General, Juvenile	Temperature_FW	Population_resilience	Environment,	Demography
1015	NA	NA	NA	Theoretical/Opinion	O. tshawytscha	Juvenile, Population	Temperature_FW	Population_resilience	Environment,	Demography
1016	NA	Northwest	Northwest_Columbia	Model, Projections/salmon	Salmonid_general	Freshwater_habitat	Flow, Temperature_FW	Population_resilience	Environment,	Demography
1017	10plus	Europe	NA	Field/RemoteSensing	S. salar	Marine, Outmigration	Density_Food, Predators, Prey	Mortality	Species_interactions,	Demography
1018	NA	Northwest	Northwest_Columbia	Field/RemoteSensing	General	Juvenile, Outmigration	Habitat	NA	Environment,	NA
1019	NA	Europe	NA	Review/MetaAnalysis	General	Juvenile, Upmigration	Disease, Management, Temperature_FW	Population_resilience	Species_interactions, Environment, , Management	Demography
1020	1	Europe	NA	Lab/Experimental	Other_fish	Egg	Environment, Habitat, Temperature_FW	Mortality, Physiology_Condition	Environment,	Demography, Physiology
1021	10plus	Europe	NA	Field/RemoteSensing	O. mykiss, S. salar, S. trutta	Juvenile, Upmigration	Disease, Management	NA	Species_interactions, , Management	NA
1022	6to10	East_North_America	NA	Field/RemoteSensing	S. salar	Outmigration	Habitat, Management, Temperature_FW	Behaviour, Mortality	Environment, , Management	Dispersal, Demography
1023	2to5	Europe	NA	Field/RemoteSensing	S. salar, S. trutta	Juvenile	Density_Food, Ecosystem, Environment	Growth	Species_interactions, Environment,	Physiology
1024	2to5	Europe	NA	Field/RemoteSensing	S. salar	Juvenile	Flow, Habitat	Habitat_Distribution	Environment,	Dispersal
1025	10plus	Europe	NA	Field/RemoteSensing	Other_fish	Juvenile, Population	Density_Food, Flow, Temperature_FW	Productivity	Species_interactions, Environment,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1026	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. tshawytscha, S. confluentus	Freshwater_habitat	Environment, Habitat, Invasives, Temperature_FW	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1027	NA	NA	NA	Review/MetaAnalysis	General	Freshwater_habitat	Flow, Habitat, Temperature_FW	NA	Environment,	NA
1028	NA	Largescale	NA	Model, Projections/ecosystem	General	Marine	Acidity, Density_Food, Ecosystem	NA	Species_interactions, Environment,	NA
1029	NA	Northwest	Northwest_Columbia	Field/RemoteSensing	General	Juvenile	Habitat, Restoration	Habitat_Distribution, Productivity	Environment, , Management	Dispersal, Demography
1030	10plus	California	California_CV	Field/RemoteSensing, Lab/Experimental, Model	O. tshawytscha	Egg, Juvenile	Dissolved_oxygen, Flow, Temperature_FW	Mortality	Environment,	Demography
1031	1	California	California_CV	Lab/Experimental	O. tshawytscha	Egg	Dissolved_oxygen, Environment, Flow, Temperature_FW	Mortality, Performance	Environment,	Demography, Physiology
1032	2to5	California	California_N	Field/RemoteSensing	O. kisutch	Juvenile	Density_Food, Environment, Habitat, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
1033	1	Europe	NA	Lab/Experimental	S. salar	Juvenile	Environment, Temperature_FW	Behaviour	Environment,	Dispersal
1034	NA	NA	NA	Field/RemoteSensing, Review/MetaAnalysis	General, Other_fish, Salmonid_general	Evolution	Genetics, Habitat	Genetics_Adaptation, Life_history, Maturation	Evolution, Environment,	Demography, Evolution, Physiology
1035	1	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Outmigration	Habitat, Management, Methods	Behaviour	Environment, , Management	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1036	2to5	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Upmigration	Habitat, Temperature_FW	Mortality	Environment,	Demography
1037	10plus	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing, Model, Projections/salmon	O. nerka	Spawning, Upmigration	Temperature_FW	Mortality, Phenology	Environment,	Demography
1038	NA	Largescale	NA	Review/MetaAnalysis	O. nerka	Marine, Population	Temperature_FW, Temperature_marine	Growth, Mortality, Phenology, Population_resilience	Environment,	Demography, Physiology
1039	NA	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Evolution	Genetics, Habitat	Genetics_Adaptation	Evolution, Environment,	Evolution
1040	1	East_North_America	NA	Lab/Experimental	O. tshawytscha	Egg, Spawning	Dissolved_oxygen, Flow, Temperature_FW	Carryover, Mortality, Physiology_Condition	Environment,	Demography, Physiology
1041	1	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Upmigration	Habitat, Temperature_FW	Behaviour, Habitat_Distribution, Mortality, Physiology_Condition	Environment,	Dispersal, Demography, Physiology
1042	2to5	East_North_America	NA	Field/RemoteSensing, Lab/Experimental	S. fontinalis	Juvenile	Density_Food	Growth, Mortality	Species_interactions,	Demography, Physiology
1043	NA	NA	NA	Review/MetaAnalysis	General	Evolution	Management, Methods	Population_resilience	, Management	Demography
1044	1	Europe	NA	Lab/Experimental	Other_species	Marine	Acidity	Performance	Environment,	Physiology
1045	10plus	East_North_America	NA	Field/RemoteSensing	Other_fish	Freshwater_habitat	Invasives, Temperature_FW	Growth, Mortality, Phenology	Species_interactions, Environment,	Demography, Physiology
1046	1	Northwest	Northwest_Columbia	Field/RemoteSensing	O. clarkii	Juvenile, Upmigration	Fisheries, Temperature_FW	Mortality	Environment, , Management	Demography
1047	10plus	Alaska	Alaska_S	Field/RemoteSensing	O. nerka	Population	Environment	Productivity	Environment,	Demography



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1048	NA	NA	NA	Theoretical/ Opinion	General	General	Management, Methods	Population_resilience	, Management	Demography
1049	2to5	Alaska	Alaska_SE	Field/ RemoteSensing	O. keta	Juvenile, Spawning, Upmigration	Management	Behaviour, Carryover, Physiology_Condition, Productivity	, Management	Dispersal, Demography, Physiology
1050	1	East_North_America	NA	Lab/ Experimental	S. salar	Marine	Acidity, Environment	Growth, Physiology_Condition	Environment,	Physiology
1051	NA	Northwest	Northwest_Columbia	Theoretical/ Opinion	Salmonid_general	Freshwater_habitat	Flow, Habitat, Management, Methods, Restoration	NA	Environment, , Management	NA
1052	NA	British_Columbia	British_Columbia_Fraser	Review/ MetaAnalysis	O. nerka	Population	Fisheries, Habitat, Temperature_FW	Population_resilience	Environment, , Management	Demography
1053	2to5	East_North_America	NA	Field/ RemoteSensing, Lab/ Experimental	Other_fish	Evolution	Temperature_FW	Growth, Performance, Physiology_Condition	Environment,	Physiology
1054	1	East_North_America	NA	Lab/ Experimental	S. fontinalis	Evolution	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
1055	1	East_North_America	NA	Field/ RemoteSensing	Other_fish	Upmigration	Flow, Habitat	Behaviour	Environment,	Dispersal
1056	NA	Northwest	Northwest_Columbia	Projections/ physical	General	Freshwater_habitat	Environment, Habitat	NA	Environment,	NA
1057	NA	NA	NA	Theoretical/ Opinion	General	Evolution	Environment, Temperature_FW, Temperature_marine	Genetics_Adaptation	Environment,	Evolution
1058	2to5	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	General	Freshwater_habitat	Flow	NA	Environment,	NA
1059	10plus	Northwest	Northwest_Columbia, Northwest_Columbia	Model	General	Freshwater_habitat, Upmigration	Habitat, Management, Temperature_FW	NA	Environment, , Management	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1060	NA	Northwest	Northwest_Columbia	Model, Projections/ salmon	O. mykiss	Population	Flow, Habitat, Restoration, Temperature_FW	Productivity	Environment, , Management	Demography
1061	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing, Lab/ Experimental, Model	O. tshawytscha	Egg	Flow, Habitat	Mortality	Environment,	Demography
1062	10plus	British_Columbia	British_Columbia_not_Fraser	Field/ RemoteSensing	Other_species	Marine	Ecosystem, Environment	NA	Species_interactions, Environment,	NA
1063	NA	NA	NA	Review/ MetaAnalysis	General	Evolution, General	Temperature_FW	Genetics_Adaptation, Performance, Physiology_Condition	Environment,	Evolution, Physiology
1064	1	British_Columbia	NA	Lab/ Experimental	O. kisutch, O. tshawytscha	Evolution	Genetics	Genetics_Adaptation, Habitat_Distribution, Performance	Evolution,	Dispersal, Evolution, Physiology
1065	10plus	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing	O. nerka	Population	Climate_indices, Density_Food	Productivity	Species_interactions, Environment,	Demography
1066	10plus	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing	O. gorbuscha, O. nerka	Marine	Density_Food	Growth, Mortality	Species_interactions,	Demography, Physiology
1067	10plus	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing	O. nerka	Juvenile, Marine	Density_Food, Environment	Mortality	Species_interactions, Environment,	Demography
1068	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. clarkii	Spawning	NA	Habitat_Distribution, Phenology		Dispersal, Demography
1069	1	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. mykiss	Juvenile	Temperature_FW	Maturation, Physiology_Condition	Environment,	Physiology
1070	2to5	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Evolution	Genetics	Genetics_Adaptation	Evolution,	Evolution
1071	2to5	Europe	NA	Lab/ Experimental	S. trutta	Egg, Juvenile	Genetics, Temperature_FW	Immune, Performance, Physiology_Condition	Evolution, Environment,	Physiology
1072	1	Northwest	Northwest_Columbia	Field/ RemoteSensing	General	Freshwater_habitat	Habitat, Temperature_FW	NA	Environment,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1073	1	California	California_CV	Lab/ Experimental	O. mykiss	Egg	Temperature_ FW	Morphology, Mortality, Performance, Physiology_Condition	Environment,	Demography, Physiology
1074	1	British_Columbia	British_Columbia_Fraser, British_Columbia_not_Fraser	Lab/ Experimental	O. kisutch, O. nerka	Juvenile, Marine	Environment	Carryover, Growth, Mortality	Environment,	Demography, Physiology
1075	2to5	Mountain_west	NA	Field/ RemoteSensing, Model	General	Freshwater_habitat	Dissolved_oxygen, Ecosystem, Environment, Flow, Habitat, Temperature_ FW	NA	Species_interactions, Environment,	NA
1076	10plus	California	California_S	Field/ RemoteSensing	Other_fish	Marine	Dissolved_oxygen	Behaviour, Habitat_Distribution	Environment,	Dispersal
1077	NA	Northwest	Northwest_Columbia	Model	O. clarkii, O. mykiss, Other_fish	Population, Spawning	Dissolved_oxygen	Growth, Maturation, Morphology, Physiology_Condition	Environment,	Physiology
1078	NA	California	California_CV	Review/ MetaAnalysis	O. tshawytscha	Population	Flow, Management, Temperature_ FW	Population_resilience, Productivity	Environment, , Management	Demography
1079	10plus	Mountain_west	NA	Model, Projections/ salmon	O. mykiss, S. fontinalis	Egg, Juvenile	Flow, Habitat	Mortality	Environment,	Demography
1080	6to10	California	California_S	Field/ RemoteSensing, Projections/ physical	O. mykiss	Freshwater_habitat	Temperature_ FW	NA	Environment,	NA
1081	10plus	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile, Marine, Outmigration	Flow	Carryover, Mortality	Environment,	Demography
1082	2to5	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile, Outmigration	Flow	Mortality	Environment,	Demography
1083	6to10	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile	Flow, Habitat, Management	Mortality	Environment, , Management	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1084	1	California	California_CV	Field/ RemoteSensing	Other_fish	Juvenile	Environment, Habitat, Predators, Temperature_ FW	Mortality	Species_interactions, Environment,	Demography
1085	2to5	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing	O. nerka	Upmigration	Environment, Habitat, Temperature_ FW	Behaviour, Physiology_Condition	Environment,	Dispersal, Physiology
1086	10plus	East_North_America	NA	Field/ RemoteSensing	S. salar	Marine	Climate_indices, Temperature_ marine	Habitat_Distribution, Maturation, Mortality	Environment,	Dispersal, Demography, Physiology
1087	NA	NA	NA	Review/ MetaAnalysis	General	Marine	NA	Genetics_Adaptation, Habitat_Distribution		Dispersal, Evolution*
1088	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Marine	Density_Food, Environment, Predators, Prey	Growth, Mortality	Species_interactions, Environment,	Demography, Physiology
1089	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Marine	Climate_indices, Density_Food, Prey	Growth, Mortality	Species_interactions, Environment,	Demography, Physiology
1090	2to5	Northwest	Northwest_Coastal	Field/ RemoteSensing	Other_species	Marine	Density_Food, Ecosystem, Environment	Productivity	Species_interactions, Environment,	Demography
1091	NA	NA	NA	Review/ MetaAnalysis	Salmonid_general	General, Upmigration	Disease, Invasives	Population_resilience	Species_interactions,	Demography
1092	1	California, Northwest	California_N, Northwest_Columbia	Lab/ Experimental	O. mykiss	Evolution	Genetics, Habitat	Genetics_Adaptation	Evolution, Environment,	Evolution
1093	1	East_North_America	NA	Lab/ Experimental	O. mykiss	Juvenile	Dissolved_oxygen	Performance, Physiology_Condition	Environment,	Physiology
1094	1	East_North_America	NA	Lab/ Experimental	Other_fish	Marine	Acidity, Dissolved_oxygen	Mortality, Performance, Physiology_Condition	Environment,	Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1095	1	Europe	NA	Field/ RemoteSensing, Lab/ Experimental	S. salar	Juvenile	Flow, Habitat, Management	Behaviour	Environment, , Management	Dispersal
1096	10plus	Alaska	Alaska_SE	Field/ RemoteSensing	General, O. gorbuscha, Other_fish, Other_species, S. malma	General	Density_Food, Habitat	Productivity	Species_interactions, Environment,	Demography
1097	10plus	Alaska	Alaska_SE	Field/ RemoteSensing	General	Freshwater_ha bitat	Density_Food, Flow, Habitat	Productivity	Species_interactions, Environment,	Demography
1098	10plus	Alaska	Alaska_SE	Field/ RemoteSensing	O. gorbuscha	Egg, Juvenile	Density_Food, Flow	Mortality	Species_interactions, Environment,	Demography
1099	2to5	Japan	NA	Field/ RemoteSensing, Lab/ Experimental	O. keta	Marine	Methods	Habitat_Distribution		Dispersal
1100	2to5	British_Colum bia	British_Columb ia_Fraser	Field/ RemoteSensing	O. nerka	Upmigration	Flow, Temperature_ FW	Mortality, Performance, Physiology_Condition, Productivity	Environment,	Demography, Physiology
1101	10plus	Northwest	Northwest_Col umbia	Field/ RemoteSensing, Model	O. tshawytscha	Juvenile, Population	Contaminants, Dissolved_oxyg en, Temperature_ FW	Genetics_Adaptation, Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography, Evolution*
1102	1	East_North_A merica	NA	Lab/ Experimental	O. tshawytscha	Juvenile	Temperature_ FW	Growth	Environment,	Physiology
1103	2to5	East_North_A merica	NA	Field/ RemoteSensing	Other_fish	Egg	Management, Methods	NA	, Management	NA
1104	NA	NA	NA	Review/ MetaAnalysis	General	General	Contaminants	NA	Environment,	NA
1105	2to5	British_Colum bia	British_Columb ia_Fraser	Field/ RemoteSensing, Model	O. mykiss	Juvenile	Density_Food, Predators, Temperature_ FW	Mortality, Physiology_Condition	Species_interactions, Environment,	Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1106	1	Europe	NA	Field/ RemoteSensing	S. trutta	Marine	Disease, Environment, Temperature_ FW	Behaviour	Species_interactions, Environment,	Dispersal
1107	1	California	California_N	Field/ RemoteSensing	O. tshawytscha	Spawning	Flow, Habitat	Habitat_Distribution	Environment,	Dispersal
1108	10plus	Europe	NA	Field/ RemoteSensing, Model	Other_fish	Marine, Population	Fisheries, Management, Temperature_ marine	Productivity	Environment, , Management	Demography
1109	2to5	California	California_CV	Field/ RemoteSensing, Model	O. tshawytscha	Juvenile	Flow, Habitat	Habitat_Distribution	Environment,	Dispersal
1110	2to5	East_North_A merica	NA	Field/ RemoteSensing	S. fontinalis, S. salar	Freshwater_ha bitat	Habitat, Temperature_ FW	NA	Environment,	NA
1111	1	South_Americ a	NA	Lab/ Experimental	Other_species	Marine	Acidity, Disease	NA	Species_interactions, Environment,	NA
1112	1	East_North_A merica	NA	Field/ RemoteSensing	S. salar, S. trutta	Upmigration	Temperature_ FW	Behaviour, Phenology, Physiology_Condition	Environment,	Dispersal, Demography, Physiology Demography
1113	2to5	Alaska	Alaska_W	Field/ RemoteSensing	O. nerka	Spawning	NA	Phenology		Demography
1114	6to10	British_Colum bia	British_Columb ia_not_Fraser	Field/ RemoteSensing	O. mykiss	Population	NA	Life_history, Population_resilience		Demography
1115	1	Northwest	Northwest_Pu get_Sound	Field/ RemoteSensing	O. mykiss	Marine	Habitat, Management, Predators	Habitat_Distribution, Mortality	Species_interactions, Environment, , Management	Dispersal, Demography
1116	2to5	Northwest	Northwest_Pu get_Sound	Field/ RemoteSensing	O. mykiss	Marine, Outmigration	Predators, Temperature_ marine	Mortality	Species_interactions, Environment,	Demography
1117	2to5	Northwest	Northwest_Pu get_Sound	Field/ RemoteSensing	O. mykiss	Juvenile, Marine	Habitat, Management	Mortality	Environment, , Management	Demography
1118	NA	Mountain_we st	NA	Model, Projections/ salmon	O. mykiss	Juvenile	Flow, Habitat, Temperature_ FW	Habitat_Distribution, Physiology_Condition	Environment,	Dispersal, Physiology
1119	NA	Largescale	NA	Field/ RemoteSensing	O. tshawytscha	Evolution	Habitat	Genetics_Adaptation	Environment,	Evolution

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1120	NA	NA	NA	Review/ MetaAnalysis	General	Egg, Juvenile	Flow, Management	Mortality	Environment, , Management	Demography
1121	1	Europe	NA	Lab/ Experimental	O. mykiss	Outmigration	Environment	Behaviour, Performance, Physiology_Condition	Environment,	Dispersal, Physiology
1122	1	East_North_America	NA	Lab/ Experimental	S. salar	Juvenile	Temperature_ FW	Growth, Performance	Environment,	Physiology
1123	NA	Japan	NA	Theoretical/ Opinion	O. keta	Upmigration	Fisheries, Management	Genetics_Adaptation, Phenology	, Management	Demography, Evolution
1124	2to5	Japan	NA	Field/ RemoteSensing	O. gorbuscha	Upmigration	Temperature_ FW, Temperature_ marine	Behaviour, Life_history	Environment,	Dispersal, Demography
1125	10plus	Japan	NA	Field/ RemoteSensing	O. keta	Juvenile, Marine, Outmigration	Temperature_ FW	Carryover, Mortality	Environment,	Demography
1126	10plus	Largescale	NA	Field/ RemoteSensing	O. gorbuscha, O. keta, O. nerka	Marine	Density_Food	Growth, Maturation	Species_interactions,	Physiology
1127	2to5	Japan	NA	Field/ RemoteSensing	O. masou	Juvenile	Density_Food, Habitat, Temperature_ FW	Growth, Maturation	Species_interactions, Environment,	Physiology
1128	1	Alaska, Russia	Alaska_W	Theoretical/ Opinion	O. gorbuscha, O. keta, O. nerka	Marine	Temperature_ marine	Habitat_Distribution	Environment,	Dispersal
1129	1	Largescale	NA	Field/ RemoteSensing, Lab/ Experimental, Theoretical/ Opinion	O. gorbuscha, O. keta, O. nerka	Marine	Temperature_ marine	Growth, Habitat_Distribution	Environment,	Dispersal, Physiology
1130	1	Japan	NA	Field/ RemoteSensing	O. masou	Outmigration	Habitat, Temperature_ FW	Growth, Life_history, Phenology	Environment,	Demography, Physiology
1131	2to5	Europe	NA	Field/ RemoteSensing, Model	S. salar	Marine	Environment, Temperature_ marine	Behaviour, Growth, Habitat_Distribution	Environment,	Dispersal, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1132	NA	Largescale	NA	Model, Projections/ ecosystem	General, Other_fish, Other_species	Marine	Temperature_marine	Habitat_Distribution	Environment,	Dispersal
1133	NA	Europe	NA	Review/ MetaAnalysis	Other_fish, Other_species, S. salar, S. trutta	General, Juvenile, Upmigration	Disease, Ecosystem, Environment, Flow	Mortality	Species_interactions, Environment,	Demography
1134	2to5	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. tshawytscha	Freshwater_habitat, Juvenile	Density_Food, Ecosystem, Management, Prey, Restoration	Behaviour	Species_interactions, , Management	Dispersal
1135	1	Northwest	Northwest_Columbia	Field/ RemoteSensing, Model	O. tshawytscha	Outmigration	Flow	Behaviour, Growth, Habitat_Distribution	Environment,	Dispersal, Physiology
1136	NA	Northwest	Northwest_Columbia	Model	Salmonid_general	General	Fisheries, Flow, Management	Livelihood	Environment, , Management	Management
1137	2to5	Alaska	Alaska_W	Field/ RemoteSensing	O. tshawytscha	Upmigration	Habitat	Behaviour, Phenology	Environment,	Dispersal, Demography
1138	1	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Upmigration	Management	Behaviour, Mortality	, Management	Dispersal, Demography
1139	NA	NA	NA	Review/ MetaAnalysis	General	Marine	Acidity	NA	Environment,	NA
1140	1	Europe	NA	Field/ RemoteSensing, Lab/ Experimental	Other_fish, S. trutta	Upmigration	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
1141	1	East_North_America	NA	Lab/ Experimental	O. mykiss	Marine	Dissolved_oxygen, Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
1142	NA	Europe	NA	Model, Projections/ ecosystem	General	Marine	Ecosystem, Environment, Methods	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1143	NA	California	NA	Projections/ salmon, Review/ MetaAnalysis	Other_fish, Salmonid_general	Population	Flow, Invasives, Temperature_FW	Habitat_Distribution, Population_resilience	Species_interactions, Environment,	Dispersal, Demography



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1144	10plus	Mountain_west	NA	Field/RemoteSensing	O. clarkii, O. mykiss	Evolution	Flow, Invasives, Temperature_FW	Genetics_Adaptation	Species_interactions, Environment,	Evolution
1145	10plus	California, Northwest	NA	Field/RemoteSensing, Model	General	Marine	Climate_indices, Ecosystem, Environment, Methods, Temperature_marine	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1146	1	East_North_America	NA	Lab/Experimental	O. nerka, S. salar	Juvenile	Methods, Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
1147	2to5	East_North_America	NA	Field/RemoteSensing	Other_fish	Marine	Habitat, Temperature_marine	Behaviour	Environment,	Dispersal
1148	1	Europe	NA	Lab/Experimental	O. mykiss	Juvenile	Habitat, Management	Behaviour	Environment, , Management	Dispersal
1149	1	Australia_New Zealand	NA	Lab/Experimental	Other_fish	Marine	Acidity	Performance	Environment,	Physiology
1150	1	Australia_New Zealand	NA	Field/RemoteSensing, Lab/Experimental	General	Marine	Acidity	Productivity	Environment,	Demography
1151	1	Australia_New Zealand	NA	Lab/Experimental	Other_fish	Marine	Acidity	Mortality, Physiology_Condition	Environment,	Demography, Physiology
1152	1	Australia_New Zealand	NA	Lab/Experimental	Other_fish	Marine	Acidity, Temperature_FW	Performance	Environment,	Physiology
1153	1	Australia_New Zealand	NA	Lab/Experimental	Other_fish	Marine	Acidity	Physiology_Condition	Environment,	Physiology
1154	10plus	Alaska	Alaska_W	Field/RemoteSensing	O. tshawytscha	Upmigration	Environment, Temperature_FW, Temperature_marine	Phenology	Environment,	Demography
1155	1	British_Columbia	British_Columbia_not_Fraser	Projections/salmon	O. tshawytscha	Juvenile	Genetics, Temperature_FW	Performance, Physiology_Condition, Population_resilience	Evolution, Environment,	Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1156	NA	NA	NA	Theoretical/ Opinion	Salmonid_ general	General	Temperature_ FW, Temperature_ marine	Population_resilience	Environment,	Demography
1157	1	British_Columbia	British_Columbia_not_Fraser	Lab/ Experimental	O. tshawytscha	Egg, Evolution, Spawning	Genetics, Temperature_ FW	Carryover, Performance, Physiology_Condition	Evolution, Environment,	Demography, Physiology
1158	10plus	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile, Outmigration	Flow, Temperature_ FW	Growth, Phenology	Environment,	Demography, Physiology
1159	10plus	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile	Flow, Habitat, Temperature_ FW	Habitat_Distribution, Productivity	Environment,	Dispersal, Demography
1160	NA	NA	NA	Review/ MetaAnalysis, Theoretical/ Opinion	Salmonid_ general	General	Ecosystem, Management	Population_resilience	Species_interactions, , Management	Demography
1161	6to10	British_Columbia, Northwest	Northwest_Columbia	Field/ RemoteSensing	O. nerka	Marine, Outmigration, Population, Upmigration	Temperature_ marine	Maturation, Mortality	Environment,	Demography, Physiology
1162	NA	Alaska	Alaska_S, Alaska_SE, Alaska_W	Field/ RemoteSensing	Other_fish, Salmonid_ general	Freshwater_habitat, Population	Environment, Flow, Habitat, Temperature_ FW	Habitat_Distribution	Environment,	Dispersal
1163	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing, Model	O. tshawytscha	Juvenile	Habitat, Methods, Prey, Temperature_ FW	Growth	Species_interactions, Environment,	Physiology
1164	6to10	Northwest	Northwest_Columbia	Field/ RemoteSensing	Other_species	Freshwater_habitat, Juvenile	Environment, Flow, Prey	NA	Species_interactions, Environment,	NA
1165	1	Northwest	Northwest_Coastal, Northwest_Puget_Sound	Lab/ Experimental	O. tshawytscha, Salmonid_ general	Juvenile	Disease, Temperature_ FW	NA	Species_interactions, Environment,	NA
1166	10plus	Alaska	Alaska_W	Field/ RemoteSensing	O. tshawytscha	Marine	Density_Food	Mortality, Productivity	Species_interactions,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1167	NA	Alaska	Alaska_W	Review/ MetaAnalysis	General	General	Ecosystem, Environment	Livelihood	Species_interactions, Environment,	Management
1168	NA	NA	NA	Review/ MetaAnalysis	General, Other_fish, Salmonid_ general	Population	Environment	Population_resilience, Productivity	Environment,	Demography
1169	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. mykiss	Juvenile	Density_Food, Temperature_ FW	Behaviour, Growth	Species_interactions, Environment,	Dispersal, Physiology
1170	1	Northwest	Northwest_Columbia	Field/ RemoteSensing, Model, Projections/ salmon	O. mykiss	Juvenile	Density_Food, Temperature_ FW	Growth	Species_interactions, Environment,	Physiology
1171	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. mykiss	Juvenile	Density_Food, Temperature_ FW	Growth, Physiology_Condition	Species_interactions, Environment,	Physiology
1172	2to5	British_Columbia	British_Columbia_Fraser	Lab/ Experimental	O. nerka	Upmigration	Flow	Performance, Physiology_Condition	Environment,	Physiology
1173	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	Salmonid_ general	Freshwater_habitat	Climate_indices, Habitat, Management	NA	Environment, , Management	NA
1174	10plus	Northwest	Northwest_Columbia	Review/ MetaAnalysis	Salmonid_ general	Freshwater_habitat	Climate_indices, Flow, Habitat, Management	NA	Environment, , Management	NA
1175	2to5	Japan	NA	Lab/ Experimental	O. keta	Juvenile, Marine	Density_Food, Temperature_ FW	Growth	Species_interactions, Environment,	Physiology
1176	1	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing	O. kisutch, O. mykiss	Juvenile	Density_Food, Flow	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1177	NA	British_Columbia	British_Columbia_Fraser, Northwest_Columbia	Field/ RemoteSensing, Model	O. clarkii, O. mykiss	Juvenile	Habitat	Habitat_Distribution	Environment,	Dispersal
1178	NA	NA	NA	Model	Salmonid_ general	Juvenile	Density_Food, Flow, Methods	Behaviour, Physiology_Condition	Species_interactions, Environment,	Dispersal, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1179	1	Mountain_west, Northwest	NA	Lab/Experimental	O. mykiss	Evolution	Genetics	Performance, Physiology_Condition	Evolution,	Physiology
1180	NA	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Egg, Evolution	Genetics, Habitat	Genetics_Adaptation, Performance, Physiology_Condition	Evolution, Environment,	Evolution, Physiology
1181	1	Northwest	Northwest_Columbia	Lab/Experimental	O. mykiss	Evolution	Genetics, Habitat	Genetics_Adaptation, Performance, Physiology_Condition	Evolution, Environment,	Evolution, Physiology
1182	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Spawning	Methods	NA		NA
1183	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Upmigration	Habitat, Management, Temperature_FW	Behaviour, Mortality	Environment, , Management	Dispersal, Demography
1184	NA	Largescale	NA	Review/MetaAnalysis	General	Freshwater_habitat, Marine	Ecosystem, Environment	NA	Species_interactions, Environment,	NA
1185	1	Northwest	Northwest_Columbia	Lab/Experimental	O. tshawytscha	Juvenile	Disease, Temperature_FW	Mortality	Species_interactions, Environment,	Demography
1186	1	Alaska	Alaska_S	Field/RemoteSensing	O. kisutch	Juvenile	Habitat	Habitat_Distribution	Environment,	Dispersal
1187	6to10	Mountain_west	NA	Field/RemoteSensing	O. mykiss	Juvenile, Upmigration	Disease, Management, Temperature_FW	NA	Species_interactions, Environment, , Management	NA
1188	10plus	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. tshawytscha	Juvenile, Marine	Management, Predators	Mortality, Phenology	Species_interactions, , Management	Demography
1189	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. tshawytscha	Freshwater_habitat	Flow, Habitat	Habitat_Distribution	Environment,	Dispersal
1190	10plus	Alaska	Alaska_W	Field/RemoteSensing	O. tshawytscha	Juvenile	Density_Food, Flow, Habitat	Habitat_Distribution, Productivity	Species_interactions, Environment,	Dispersal, Demography
1191	NA	Mountain_west	NA	Model, Projections/salmon	O. clarkii	Population	Management, Methods	Population_resilience	, Management	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1192	1	California	California_CV	Lab/ Experimental	O. tshawytscha	Juvenile	Disease, Genetics, Temperature_ FW	Mortality	Species_interactions, Evolution*, Environment,	Demography
1193	1	California	California_N	Field/ RemoteSensing	O. kisutch	Juvenile	Habitat, Management, Temperature_ FW	Habitat_Distribution	Environment, , Management	Dispersal
1194	NA	Northwest	Northwest_Co astal	Model, Projections/ salmon	O. kisutch, O. tshawytscha	Juvenile, Population	Flow, Management	Carryover, Life_history, Mortality, Productivity	Environment, , Management	Demography
1195	NA	Antarctica	NA	Theoretical/ Opinion	Other_species	Marine	Acidity, Density_Food	Population_resilience	Species_interactions, Environment,	Demography
1196	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Population	Fisheries, Flow, Temperature_ FW, Temperature_ marine	Productivity	Environment, , Management	Demography
1197	NA	East_North_A merica	NA	Model	S. salar	Population	Flow, Habitat, Management	Life_history, Mortality, Productivity	Environment, , Management	Demography
1198	NA	Largescale	NA	Review/ MetaAnalysis	O. gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha, S. salar	General	Habitat	Genetics_Adaptation, Habitat_Distribution	Environment,	Dispersal, Evolution*
1199	10plus	Northwest	Northwest_Col umbia	Field/ RemoteSensing	General	Freshwater_ha bitat	Environment, Habitat	NA	Environment,	NA
1200	NA	NA	NA	Review/ MetaAnalysis	General	Marine	Acidity, Contaminants, Temperature_ marine	NA	Environment,	NA
1201	1	Northwest	Northwest_Col umbia	Field/ RemoteSensing	Other_fish	Juvenile, Upmigration	Contaminants	NA	Environment,	NA
1202	NA	NA	NA	Theoretical/ Opinion	Salmonid_ general	General, Juvenile	Density_Food, Methods, Temperature_ FW	Behaviour, Diet	Species_interactions, Environment,	Species_interactio ns, Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1203	NA	Europe	NA	Review/ MetaAnalysis	S. salar	Juvenile, Outmigration	Environment	Physiology_Condition	Environment,	Physiology
1204	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile, Outmigration	Environment, Temperature_ FW	Physiology_Condition	Environment,	Physiology
1205	NA	Northwest	Northwest_Co astal	Model	O. keta, O. kisutch, O. mykiss, O. tshawytscha	Freshwater_ha bitat	Habitat, Restoration	Productivity	Environment, , Management	Demography
1206	1	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. nerka	Upmigration	Flow, Management, Temperature_ FW	Behaviour, Mortality, Performance	Environment, , Management	Dispersal, Demography, Physiology
1207	NA	Northwest	Northwest_Col umbia	Theoretical/ Opinion	O. tshawytscha	Marine	Management, Predators	Mortality	Species_interactions, , Management	Demography
1208	NA	Northwest	Northwest_Col umbia	Review/ MetaAnalysis, Theoretical/ Opinion	General, O. kisutch, O. mykiss, O. tshawytscha, Other_fish, Other_species	Freshwater_ha bitat	Habitat, Management	Population_resilience	Environment, , Management	Demography
1209	NA	Northwest	Northwest_Col umbia	Theoretical/ Opinion	Other_species	Upmigration	Management, Predators	NA	Species_interactions, , Management	NA
1210	2to5	Japan	NA	Field/ RemoteSensing	O. keta	Marine, Upmigration	Temperature_ FW	Behaviour, Maturation, Physiology_Condition	Environment,	Dispersal, Physiology
1211	NA	California	California_CV	Model	O. tshawytscha	Outmigration	Predators, Temperature_ FW	Behaviour, Mortality, Phenology	Species_interactions, Environment,	Dispersal, Demography
1212	10plus	Alaska	Alaska_S	Field/ RemoteSensing	O. kisutch, O. tshawytscha	Marine, Population	Predators	Life_history, Mortality	Species_interactions,	Demography
1213	NA	Northwest	Northwest_Co astal, Northwest_Col umbia	Review/ MetaAnalysis, Theoretical/ Opinion	O. keta, O. kisutch, O. mykiss, O. nerka, O. tshawytscha	Population	Environment, Habitat, Management	Population_resilience	Environment, , Management	Demography
1214	2to5	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Outmigration	Flow, Habitat	Mortality	Environment,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1215	NA	NA	NA	Review/ MetaAnalysis	General	General	Contaminants, Flow, Temperature_ FW	NA	Environment,	NA
1216	NA	California, Northwest	California_N, California_S, Northwest_Co astal	Field/ RemoteSensing, Projections/ physical	General	Marine	Habitat	NA	Environment,	NA
1217	1	Europe	NA	Lab/ Experimental	S. trutta	Juvenile	Dissolved_oxyg en, Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
1218	NA	California	California_N	Model	O. kisutch	Freshwater_ha bitat	Flow, Habitat, Management, Methods, Restoration, Temperature_ FW	Habitat_Distribution, Productivity	Environment, , Management	Dispersal, Demography
1219	NA	California	California_N	Model	O. kisutch, O. mykiss, O. tshawytscha	Freshwater_ha bitat	Flow, Habitat, Restoration	Habitat_Distribution	Environment, , Management	Dispersal
1220	NA	California	California_CV	Model	General	Freshwater_ha bitat	Flow, Management, Methods, Temperature_ FW	NA	Environment, , Management	NA
1221	2to5	Europe	NA	Field/ RemoteSensing	General	Freshwater_ha bitat	Habitat, Restoration, Temperature_ FW	NA	Environment, , Management	NA
1222	2to5	East_North_A merica	NA	Lab/ Experimental	S. fontinalis	Juvenile	Temperature_ FW	Mortality, Performance, Physiology_Condition	Environment,	Demography, Physiology
1223	10plus	Largescale	NA	Field/ RemoteSensing	O. kisutch, O. tshawytscha	Marine	Fisheries, Management	Mortality, Productivity	, Management	Demography
1224	NA	Europe	NA	Model, Projections/ salmon	Other_fish, S. salar	Juvenile, Spawning, Upmigration	Environment, Flow	Habitat_Distribution, Performance, Population_resilience	Environment,	Dispersal, Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1225	1	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Spawning, Upmigration	Genetics	Phenology	Evolution,	Demography
1226	NA	Largescale	NA	Field/ RemoteSensing	O. gorbuscha, O. keta, O. kisutch	Spawning	Genetics	Phenology	Evolution,	Demography
1227	1	East_North_America	NA	Field/ RemoteSensing	S. fontinalis, S. salar	Freshwater_habitat	Habitat, Methods, Temperature_FW	Habitat_Distribution	Environment,	Dispersal
1228	2to5	East_North_America	NA	Field/ RemoteSensing, Model	General	Freshwater_habitat	Environment, Habitat, Methods, Temperature_FW	NA	Environment,	NA
1229	1	East_North_America	NA	Field/ RemoteSensing	Other_fish, S. salar	Juvenile	Predators	Habitat_Distribution	Species_interactions,	Dispersal
1230	1	East_North_America	NA	Field/ RemoteSensing	S. salar	Upmigration	Flow, Restoration, Temperature_FW	Behaviour, Habitat_Distribution	Environment, , Management	Dispersal
1231	NA	Europe	NA	Field/ RemoteSensing	S. salar	General	Methods	Growth		Physiology
1232	2to5	California	California_N	Field/ RemoteSensing	O. kisutch	Juvenile	Dissolved_oxygen, Flow	Mortality	Environment,	Demography
1233	1	Europe	NA	Lab/ Experimental	O. mykiss	Egg	Environment, Genetics, Temperature_FW	Genetics_Adaptation, Mortality, Physiology_Condition	Evolution, Environment,	Demography, Evolution, Physiology
1234	10plus	Largescale	NA	Field/ RemoteSensing	O. tshawytscha	Marine, Population	Fisheries	Life_history, Maturation	, Management	Demography, Physiology
1235	10plus	Alaska, Largescale	Alaska_S	Field/ RemoteSensing	O. gorbuscha	Marine	Climate_indices, Density_Food, Management, Temperature_marine	Productivity	Species_interactions, Environment, , Management	Demography



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1236	10plus	Northwest	Northwest_Coastal	Field/RemoteSensing, Projections/salmon	O. kisutch	Juvenile	Flow	Productivity	Environment,	Demography
1237	1	Japan	NA	Lab/Experimental	O. keta	Outmigration	Density_Food, Temperature_FW	Growth, Physiology_Condition	Species_interactions, Environment,	Physiology
1238	1	Japan	NA	Lab/Experimental	O. mykiss	Evolution	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
1239	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. nerka, O. tshawytscha	Upmigration	Habitat, Management, Methods	Behaviour, Habitat_Distribution	Environment, , Management	Dispersal
1240	10plus	Alaska	Alaska_S, Alaska_SE, Alaska_W	Field/RemoteSensing	O. keta, O. kisutch, O. nerka, O. tshawytscha	Marine, Population	Fisheries	Growth, Life_history, Maturation	, Management	Demography, Physiology
1241	10plus	Alaska	Alaska_S, Alaska_SE, Alaska_W	Field/RemoteSensing	O. gorbuscha	Upmigration	Genetics	Genetics_Adaptation, Phenology	Evolution,	Demography, Evolution
1242	NA	British_Columbia	British_Columbia_not_Fraser	Review/MetaAnalysis	General	Marine	Climate_indices, Ecosystem, Management, Temperature_marine	NA	Species_interactions, Environment, , Management	NA
1243	1	Japan	NA	Lab/Experimental	O. mykiss	Juvenile	Temperature_FW	Genetics_Adaptation, Physiology_Condition	Environment,	Evolution, Physiology
1244	1	California	California_CV	Field/RemoteSensing, Model	O. tshawytscha	Outmigration	Flow, Habitat, Methods	Habitat_Distribution	Environment,	Dispersal
1245	10plus	Europe	NA	Field/RemoteSensing	S. salar	Marine	Temperature_marine	Life_history, Maturation, Mortality, Productivity	Environment,	Demography, Physiology
1246	10plus	Europe	NA	Field/RemoteSensing	S. salar	Marine, Population	Temperature_marine	Productivity	Environment,	Demography
1247	2to5	Alaska	Alaska_W	Field/RemoteSensing	O. mykiss	General	Genetics	Genetics_Adaptation, Life_history	Evolution,	Demography, Evolution
1248	1	British_Columbia	British_Columbia_Fraser	Lab/Experimental	O. mykiss	Juvenile	Temperature_FW	Physiology_Condition	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1249	1	Europe	NA	Field/ RemoteSensing	O. mykiss	Juvenile	Contaminants	Physiology_Condition	Environment,	Physiology
1250	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile	Density_Food, Habitat	Growth, Habitat_Distribution	Species_interactions, Environment,	Dispersal, Physiology
1251	10plus	California, Northwest	California_N, California_S, Northwest_Co astal	Field/ RemoteSensing	General	Marine	Acidity	NA	Environment,	NA
1252	2to5	California	California_N	Field/ RemoteSensing	O. kisutch, O. mykiss	Juvenile, Outmigration	Dissolved_oxyg en, Habitat	Behaviour, Growth, Life_history, Physiology_Condition	Environment,	Dispersal, Demography, Physiology
1253	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Evolution, Population	Genetics, Management	Genetics_Adaptation	Evolution, , Management	Evolution
1254	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Population	Fisheries, Flow, Management, Temperature_ marine	Life_history, Maturation, Mortality	Environment, , Management	Demography, Physiology
1255	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Population	Flow, Temperature_ marine	Maturation, Mortality	Environment,	Demography, Physiology
1256	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Juvenile, Outmigration	Temperature_ FW, Temperature_ marine	Phenology	Environment,	Demography
1257	NA	Largescale	NA	Review/ MetaAnalysis	Other_fish	Marine	Ecosystem, Temperature_ marine	Habitat_Distribution, Productivity	Species_interactions, Environment,	Dispersal, Demography
1258	1	British_Colum bia	British_Colum bia_not_Fraser	Lab/ Experimental	O. gorbuscha	Egg, Juvenile, Marine	Acidity	Growth, Physiology_Condition	Environment,	Physiology
1259	10plus	NA	NA	Review/ MetaAnalysis	General	Freshwater_ha bitat	Habitat, Temperature_ FW	NA	Environment,	NA
1260	10plus	East_North_A merica	NA	Field/ RemoteSensing	Other_fish	Upmigration	Dissolved_oxyg en, Methods, Temperature_ FW	Mortality	Environment,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1261	NA	NA	NA	Theoretical/ Opinion	General	Population	NA	Population_resilience		Demography
1262	1	British_Columbia, Northwest	British_Columbia_Fraser, British_Columbia_not_Fraser, Northwest_Coastal, Northwest_Columbia	Field/ RemoteSensing	General	Freshwater_habitat	Temperature_FW	NA	Environment,	NA
1263	2to5	Europe	NA	Field/ RemoteSensing	S. salar	Outmigration	Habitat, Management	Behaviour, Mortality	Environment, , Management	Dispersal, Demography
1264	NA	Largescale	NA	Review/ MetaAnalysis	O. kisutch, O. tshawytscha	Marine	Fisheries	Productivity	, Management	Demography
1265	10plus	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing	General, Salmonid_general	Upmigration	Flow, Temperature_FW	Mortality	Environment,	Demography
1266	1	Northwest	Northwest_Coastal	Lab/ Experimental	O. mykiss	Egg, Juvenile	Disease, Temperature_FW	Physiology_Condition	Species_interactions, Environment,	Physiology
1267	1	Asia_other	NA	Lab/ Experimental	O. mykiss	Juvenile	Temperature_FW	Physiology_Condition	Environment,	Physiology
1268	NA	NA	NA	Review/ MetaAnalysis	O. mykiss, S. salar	Egg, Spawning	Temperature_FW	Carryover, Performance, Physiology_Condition	Environment,	Demography, Physiology
1269	NA	NA	NA	Review/ MetaAnalysis	General	Egg, Spawning	Temperature_FW, Temperature_marine	Productivity	Environment,	Demography
1270	NA	NA	NA	Review/ MetaAnalysis	General	Juvenile	Ecosystem, Flow	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1271	10plus	East_North_America	NA	Field/ RemoteSensing	S. salar	Marine, Population	NA	Life_history, Maturation, Mortality		Demography, Physiology
1272	10plus	Europe	NA	Field/ RemoteSensing	S. trutta	Juvenile	Density_Food, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
1273	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Spawning	Flow	Behaviour	Environment,	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1274	1	East_North_America	NA	Lab/Experimental	Other_species	Marine	Acidity, Contaminants	NA	Environment,	NA
1275	1	Europe	NA	Lab/Experimental	S. trutta	Egg, Juvenile	Temperature_FW	Growth, Morphology	Environment,	Physiology
1276	NA	NA	NA	Theoretical/Opinion	General	General	Ecosystem	NA	Species_interactions,	NA
1277	1	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Juvenile, Outmigration	Predators	Behaviour, Mortality	Species_interactions,	Dispersal, Demography
1278	NA	NA	NA	Model	Salmonid_general	Population, Spawning	Fisheries, Management, Methods	Population_resilience	, Management	Demography
1279	2to5	California	California_CV	Field/RemoteSensing	O. mykiss	Evolution	Genetics, Temperature_FW	Genetics_Adaptation, Life_history, Performance	Evolution, Environment,	Demography, Evolution, Physiology
1280	NA	Australia_New Zealand	NA	Review/MetaAnalysis	Other_fish	Marine	Ecosystem, Fisheries, Temperature_marine	Livelihood	Species_interactions, Environment, , Management	Management
1281	1	Northwest	Northwest_Coastal	Field/RemoteSensing	O. clarkii	Freshwater_habitat, Juvenile	Flow, Habitat	Behaviour, Habitat_Distribution	Environment,	Dispersal
1282	NA	Northwest	Northwest_Coastal	Model, Projections/salmon	O. clarkii	Juvenile, Population	Environment, Flow, Management, Temperature_FW	Life_history, Population_resilience, Productivity	Environment, , Management	Demography
1283	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. tshawytscha	Juvenile	Habitat, Temperature_FW	Growth, Life_history	Environment,	Demography, Physiology
1284	10plus	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing, Model	General	Marine	Climate_indices, Ecosystem, Management, Temperature_marine	NA	Species_interactions, Environment, , Management	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1285	10plus	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. kisutch, O. tshawytscha	Marine	Climate_indices, Density_Food, Ecosystem, Environment, Prey, Temperature_marine	Mortality	Species_interactions, Environment,	Demography
1286	6to10	California	California_CV	Field/RemoteSensing	O. tshawytscha	Juvenile, Outmigration	Flow	Behaviour, Mortality	Environment,	Dispersal, Demography
1287	2to5	Europe	NA	Field/RemoteSensing	S. salar	Juvenile, Outmigration	Flow	Phenology, Physiology_Condition	Environment,	Demography, Physiology
1288	6to10	Northwest	Northwest_Coastal	Field/RemoteSensing	General	Marine	Dissolved_oxygen	NA	Environment,	NA
1289	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. mykiss, O. tshawytscha	Juvenile, Outmigration, Spawning, Upmigration	Flow, Management, Temperature_FW	Mortality, Phenology	Environment, , Management	Demography
1290	10plus	California	California_CV	Field/RemoteSensing	O. tshawytscha	Upmigration	Flow, Management	Behaviour, Mortality	Environment, , Management	Dispersal, Demography
1291	2to5	California	California_CV	Field/RemoteSensing	O. tshawytscha	Spawning	Flow, Management, Temperature_FW	Habitat_Distribution, Mortality, Phenology	Environment, , Management	Dispersal, Demography
1292	10plus	Northwest	Northwest_Coastal	Field/RemoteSensing	O. kisutch, O. tshawytscha	Marine	Climate_indices, Environment, Temperature_marine	Mortality	Environment,	Demography
1293	6to10	Northwest	Northwest_Coastal	Field/RemoteSensing	O. kisutch, O. tshawytscha	Marine	Density_Food, Environment, Habitat	Habitat_Distribution, Phenology	Species_interactions, Environment,	Dispersal, Demography
1294	10plus	Largescale	NA	Field/RemoteSensing	General, Other_fish, Salmonid_general	Marine	Fisheries, Management, Temperature_marine	Productivity	Environment, , Management	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1295	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss, O. tshawytscha	Marine, Outmigration	Environment, Flow, Temperature_FW, Temperature_marine	Mortality	Environment,	Demography
1296	2to5	East_North_America	NA	Field/RemoteSensing	S. fontinalis	Juvenile	Density_Food, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
1297	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. kisutch, O. tshawytscha	Outmigration	Environment, Predators	Mortality	Species_interactions, Environment,	Demography
1298	2to5	California	California_CV	Field/RemoteSensing	O. tshawytscha	Juvenile	Habitat	Behaviour, Habitat_Distribution, Mortality	Environment,	Dispersal, Demography
1299	1	Europe	NA	Field/RemoteSensing	Other_fish	General, Upmigration	Fisheries, Temperature_FW	Performance, Physiology_Condition	Environment, , Management	Physiology
1300	NA	NA	NA	Theoretical/Opinion	General	Marine	Fisheries, Management, Methods	Population_resilience	, Management	Demography
1301	10plus	Europe	NA	Field/RemoteSensing, Model	S. salar	Evolution, Population	Flow, Temperature_FW	Growth, Life_history, Productivity	Environment,	Demography, Physiology
1302	NA	Europe	NA	Model, Projections/salmon	S. salar	Evolution, Population	Flow, Management, Temperature_FW, Temperature_marine	Genetics_Adaptation, Maturation	Environment, , Management	Evolution, Physiology
1303	NA	Europe	NA	Model, Projections/salmon	S. salar	Evolution, Marine, Population	Fisheries, Temperature_marine	Life_history, Maturation, Productivity	Environment, , Management	Demography, Physiology
1304	2to5	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	General, Salmonid_general	Freshwater_habitat, Upmigration	Flow, Habitat, Temperature_FW	NA	Environment,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1305	NA	Alaska	Alaska_S	Lab/ Experimental, Model, Projections/ physical	Salmonid_ general	Freshwater_ha bitat	Environment, Habitat, Temperature_ FW	Habitat_Distribution	Environment,	Dispersal
1306	NA	Alaska, British_Colum bia	Alaska_S, Alaska_SE, British_Colum bia_not_Fraser	Review/ MetaAnalysis	Salmonid_ general	Freshwater_ha bitat	Environment, Habitat	Habitat_Distribution	Environment,	Dispersal
1307	NA	NA	NA	Review/ MetaAnalysis	General	General	Dissolved_oxyg en	Physiology_Condition	Environment,	Physiology
1308	NA	Northwest	Northwest_Col umbia	Model	O. tshawytscha	Juvenile, Upmigration	Temperature_ FW	Behaviour, Mortality, Phenology	Environment,	Dispersal, Demography
1309	1	Europe	NA	Lab/ Experimental	S. trutta	General	Contaminants	Physiology_Condition	Environment,	Physiology
1310	1	California	California_CV	Lab/ Experimental	O. tshawytscha	Juvenile	Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
1311	NA	Northwest	Northwest_Col umbia	Model	General	Freshwater_ha bitat	Flow, Habitat, Management	NA	Environment, , Management	NA
1312	2to5	Northwest	Northwest_Co astal	Field/ RemoteSensing	O. kisutch, O. tshawytscha	Marine	Environment, Habitat	Habitat_Distribution	Environment,	Dispersal
1313	1	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile	Flow, Habitat	Habitat_Distribution	Environment,	Dispersal
1314	NA	Largescale	NA	Model	General	Marine	Ecosystem, Environment, Temperature_ marine	NA	Species_interactions, Environment,	NA
1315	NA	NA	NA	Review/ MetaAnalysis, Theoretical/ Opinion	General	Marine	Acidity, Dissolved_oxyg en, Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
1316	NA	NA	NA	Review/ MetaAnalysis, Theoretical/ Opinion	General	Marine	Acidity, Dissolved_oxyg en, Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1317	NA	NA	NA	Theoretical/ Opinion	General	Marine	Acidity, Dissolved_oxyg en, Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
1318	10plus	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile, Upmigration	Flow, Management	Mortality, Productivity	Environment, , Management	Demography
1319	NA	California, Northwest	NA	Projections/ physical	General	Marine	Acidity, Dissolved_oxyg en, Temperature_ marine	NA	Environment,	NA
1320	1	British_Colum bia	British_Columb ia_Fraser	Lab/ Experimental	O. nerka	Upmigration	Fisheries, Temperature_ FW	Physiology_Condition	Environment, , Management	Physiology
1321	1	British_Colum bia	British_Columb ia_Fraser	Field/ RemoteSensing	O. nerka	Spawning	Density_Food, Temperature_ FW	Morphology, Performance, Physiology_Condition	Species_interactions, Environment,	Physiology
1322	2to5	Europe	NA	Lab/ Experimental	S. salar	Juvenile	Density_Food	Behaviour, Habitat_Distribution	Species_interactions,	Dispersal
1323	6to10	Europe	NA	Field/ RemoteSensing	S. salar, S. trutta	Egg, Spawning	Habitat, Restoration	Mortality	Environment, , Management	Demography
1324	6to10	Europe	NA	Field/ RemoteSensing, Model	S. salar	Outmigration	Flow, Methods, Temperature_ FW	Phenology	Environment,	Demography
1325	10plus	Europe	NA	Lab/ Experimental	S. salar	Juvenile, Upmigration	Disease	Genetics_Adaptation	Species_interactions,	Evolution
1326	10plus	British_Colum bia	British_Columb ia_Fraser	Field/ RemoteSensing	O. gorbuscha, O. nerka	Marine	Environment	Behaviour	Environment,	Dispersal
1327	NA	Northwest	Northwest_Col umbia	Projections/ physical	General	Freshwater_ha bitat	Flow	NA	Environment,	NA
1328	NA	Largescale	NA	Review/ MetaAnalysis, Theoretical/ Opinion	Salmonid_ general	Evolution, General	Habitat	Behaviour, Genetics_Adaptation, Life_history, Phenology	Environment,	Dispersal, Demography, Evolution
1329	1	Australia_New Zealand	NA	Lab/ Experimental	O. tshawytscha	Upmigration	Genetics, Habitat	Behaviour, Genetics_Adaptation, Phenology	Evolution, Environment,	Dispersal, Demography, Evolution



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1330	NA	California	California_CV	Review/ MetaAnalysis	O. tshawytscha	General	Flow, Habitat, Management, Temperature_ FW	Population_resilience	Environment, , Management	Demography
1331	10plus	California	California_N	Field/ RemoteSensing	O. kisutch, O. tshawytscha	Population	Climate_indice s, Environment, Flow, Temperature_ FW	Productivity	Environment,	Demography
1332	NA	California	California_CV, California_N	Theoretical/ Opinion	O. kisutch, O. mykiss, O. tshawytscha	Freshwater_ha bitat, Juvenile, Upmigration	Habitat, Management	Population_resilience	Environment, , Management	Demography
1333	1	East_North_A merica	NA	Lab/ Experimental	O. tshawytscha, S. salar	Juvenile	Methods, Temperature_ FW	Physiology_Condition	Environment,	Physiology
1334	1	British_Colum bia	British_Columb ia_Fraser	Lab/ Experimental	O. gorbuscha, O. keta	Spawning, Upmigration	Fisheries	Mortality, Physiology_Condition	, Management	Demography, Physiology
1335	1	Alaska, Russia	Alaska_W	Field/ RemoteSensing	O. gorbuscha, O. keta	Marine	Density_Food, Ecosystem, Environment	Productivity	Species_interactions, Environment,	Demography
1336	1	Australia_New Zealand	NA	Field/ RemoteSensing	Other_fish	Marine	Acidity	Performance	Environment,	Physiology
1337	NA	NA	NA	Theoretical/ Opinion	General	General	Invasives	Population_resilience	Species_interactions,	Demography
1338	NA	NA	NA	Model	Salmonid_ general	Egg, Juvenile, Spawning	Density_Food, Flow, Habitat, Methods, Temperature_ FW	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1339	NA	NA	NA	Review/ MetaAnalysis	Other_species	Marine	Ecosystem, Methods	NA	Species_interactions,	NA
1340	10plus	California	California_N	Field/ RemoteSensing	Other_fish	Marine	Climate_indice s, Ecosystem	Productivity	Species_interactions, Environment,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1341	NA	Alaska, British_Columbia, Largescale, Northwest	Alaska_S, Alaska_SE, Alaska_W, British_Columbia_Fraser, British_Columbia_not_Fraser	Review/ MetaAnalysis	O. nerka	Marine, Population	Fisheries, Habitat, Management	Population_resilience, Productivity	Environment, , Management	Demography
1342	NA	NA	NA	Projections/ ecosystem, Review/ MetaAnalysis	General	General	Ecosystem, Methods	NA	Species_interactions, NA	
1343	2to5	California	California_N	Lab/ Experimental	O. tshawytscha	Juvenile, Upmigration	Disease, Temperature_FW	NA	Species_interactions, Environment, NA	
1344	1	California	California_N	Lab/ Experimental	O. tshawytscha	Juvenile	Disease	Mortality	Species_interactions, Demography	
1345	2to5	California	California_N	Field/ RemoteSensing, Lab/ Experimental	O. kisutch, O. tshawytscha	Juvenile, Upmigration	Disease, Temperature_FW	Mortality	Species_interactions, Demography Environment,	
1346	2to5	California	California_N	Field/ RemoteSensing	O. kisutch, O. tshawytscha	Juvenile, Upmigration	Disease, Flow, Temperature_FW	Mortality	Species_interactions, Demography Environment,	
1347	NA	Northwest	NA	Review/ MetaAnalysis	General	Freshwater_habitat	Flow, Management, Temperature_FW	Genetics_Adaptation, Population_resilience	Environment, , Management	Demography, Evolution*
1348	2to5	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing	O. nerka	Juvenile, Marine, Outmigration	Habitat	Behaviour, Mortality	Environment,	Dispersal, Demography
1349	1	Mountain_west	NA	Lab/ Experimental	General, O. clarkii, O. mykiss, Other_fish, Salmonid_general	General	Temperature_FW	Morphology, Performance	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1350	NA	British_Columbia	British_Columbia_Fraser	Projections/salmon	O. nerka	Evolution	Genetics, Temperature_FW	Genetics_Adaptation, Phenology	Evolution, Environment,	Demography, Evolution
1351	10plus	Alaska	Alaska_S	Field/RemoteSensing	O. nerka	Juvenile, Outmigration	Habitat, Management, Temperature_FW	Growth, Mortality, Phenology	Environment, , Management	Demography, Physiology
1352	10plus	Europe	NA	Field/RemoteSensing	S. salar	Evolution, Marine	Genetics	Genetics_Adaptation, Growth, Maturation	Evolution,	Evolution, Physiology
1353	NA	NA	NA	Model	General	Population	NA	Life_history, Population_resilience		Demography
1354	NA	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. tshawytscha	Juvenile, Spawning	Density_Food, Habitat, Temperature_FW	Growth, Habitat_Distribution, Phenology	Species_interactions, Environment,	Dispersal, Demography, Physiology
1355	1	NA	NA	Lab/Experimental	O. tshawytscha	Egg	Temperature_FW	Physiology_Condition	Environment,	Physiology
1356	1	Northwest	Northwest_Coastal	Field/RemoteSensing	O. mykiss	Juvenile	Habitat	Behaviour, Habitat_Distribution	Environment,	Dispersal
1357	2to5	East_North_America	NA	Field/RemoteSensing, Lab/Experimental	S. salar	Outmigration	Temperature_FW	Mortality, Physiology_Condition	Environment,	Demography, Physiology
1358	10plus	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing, Model	Salmonid_general	Freshwater_habitat	Habitat, Restoration	NA	Environment, , Management	NA
1359	10plus	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. kisutch	Freshwater_habitat, Juvenile	Habitat, Management	Habitat_Distribution, Productivity	Environment, , Management	Dispersal, Demography
1360	1	Europe	NA	Field/RemoteSensing	S. salar	Outmigration	Habitat, Management	Behaviour	Environment, , Management	Dispersal
1361	1	Europe	NA	Field/RemoteSensing	S. salar	Outmigration	Habitat, Management	Behaviour	Environment, , Management	Dispersal
1362	10plus	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Marine	Environment	Mortality	Environment,	Demography
1363	NA	Northwest	Northwest_Coastal	Model	O. tshawytscha	Marine	Acidity	Productivity	Environment,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1364	NA	Alaska	Alaska_W	Projections/ ecosystem	General	Marine	Ecosystem, Environment, Prey	NA	Species_interactions, Environment,	NA
1365	NA	Alaska	Alaska_W	Model	General, Other_species	Marine	Ecosystem, Predators	NA	Species_interactions,	NA
1366	1	California	California_CV	Lab/ Experimental	O. mykiss	Juvenile	Contaminants	Performance, Physiology_Condition	Environment,	Physiology
1367	1	Europe	NA	Lab/ Experimental	Other_fish	General	NA	Immune, Physiology_Condition		Physiology
1368	1	East_North_America	NA	Field/ RemoteSensing	S. salar	Upmigration	Fisheries, Flow	Behaviour	Environment, , Management	Dispersal
1369	1	East_North_America	NA	Field/ RemoteSensing	S. salar	Spawning, Upmigration	Fisheries	Behaviour, Performance	, Management	Dispersal, Physiology
1370	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	General	Juvenile	Density_Food, Prey, Temperature_ FW	NA	Species_interactions, Environment,	NA
1371	NA	NA	NA	Review/ MetaAnalysis	Other_species	Marine	Acidity, Ecosystem, Fisheries	NA	Species_interactions, Environment, , Management	NA
1372	10plus	East_North_America, Europe	NA	Field/ RemoteSensing	Other_species	Marine	Acidity, Ecosystem	NA	Species_interactions, Environment,	NA
1373	10plus	British_Columbia	British_Columbia_not_Fraser	Review/ MetaAnalysis	General	Marine	Dissolved_oxygen, Environment, Habitat, Temperature_ FW, Temperature_ marine	NA	Environment,	NA
1374	2to5	Mountain_west	NA	Field/ RemoteSensing	S. trutta	Freshwater_habitat	Restoration	Habitat_Distribution	, Management	Dispersal
1375	10plus	Largescale	NA	Field/ RemoteSensing	O. kisutch, O. tshawytscha	Marine	Fisheries	Livelihood	, Management	Management
1376	1	Europe	NA	Field/ RemoteSensing	S. trutta	Egg, Spawning	Habitat	Behaviour, Habitat_Distribution	Environment,	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1377	6to10	East_North_America, Europe	NA	Field/RemoteSensing	S. salar	Marine	Habitat	Behaviour, Habitat_Distribution	Environment,	Dispersal
1378	6to10	Europe	NA	Field/RemoteSensing	S. salar	Outmigration	Environment	Behaviour, Phenology	Environment,	Dispersal, Demography
1379	1	Mountain_west	NA	Field/RemoteSensing	O. mykiss, S. fontinalis, S. trutta	Juvenile	Flow, Habitat, Temperature_FW	Behaviour, Habitat_Distribution	Environment,	Dispersal
1380	NA	Africa	NA	Projections/salmon	O. mykiss	Freshwater_habitat, General	Temperature_FW	Habitat_Distribution	Environment,	Dispersal
1381	NA	Mountain_west	NA	Projections/salmon	O. clarkii	Population	Habitat, Temperature_FW	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
1382	2to5	Mountain_west	NA	Field/RemoteSensing, Projections/physical	General	Freshwater_habitat	Temperature_FW	NA	Environment,	NA
1383	10plus	California	California_N	Field/RemoteSensing	O. tshawytscha	Juvenile, Upmigration	Disease, Management	Mortality	Species_interactions, , Management	Demography
1384	6to10	East_North_America	NA	Field/RemoteSensing	S. fontinalis	Juvenile	Temperature_FW	Growth, Mortality	Environment,	Demography, Physiology
1385	NA	Largescale	NA	Model	General, Other_species	Marine	Ecosystem, Fisheries	NA	Species_interactions, , Management	NA
1386	1	California	California_CV	Lab/Experimental	O. tshawytscha	Juvenile	Methods, Temperature_FW	Growth	Environment,	Physiology
1387	NA	Europe	NA	Model	General	Freshwater_habitat	Ecosystem, Habitat, Management, Methods	Habitat_Distribution	Species_interactions, Environment, , Management	Dispersal
1388	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Juvenile, Outmigration	Density_Food, Temperature_FW	Phenology, Physiology_Condition	Species_interactions, Environment,	Demography, Physiology
1389	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. keta, O. kisutch, O. tshawytscha	Outmigration	Flow, Habitat, Methods	Habitat_Distribution	Environment,	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1390	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	General	Outmigration	Dissolved_oxygen, Environment	NA	Environment,	NA
1391	10plus	California	California_S	Field/RemoteSensing, Projections/physical	General, Salmonid_general	Freshwater_habitat	Flow, Habitat, Management	NA	Environment, , Management	NA
1392	10plus	Alaska	Alaska_S, Alaska_W	Field/RemoteSensing	O. nerka	Population	Climate_indices, Habitat	Productivity	Environment,	Demography
1393	6to10	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing, Model	S. salar	Marine	Disease, Management, Temperature_FW	Population_resilience	Species_interactions, Environment, , Management	Demography
1394	1	South_America	NA	Lab/Experimental	S. salar	Egg	Temperature_FW	Morphology, Performance	Environment,	Physiology
1395	2to5	East_North_America	NA	Field/RemoteSensing	O. mykiss	Juvenile	Dissolved_oxygen, Invasives, Temperature_FW	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1396	NA	NA	NA	Model	Salmonid_general	Egg, Freshwater_habitat	Management, Methods, Restoration	NA	, Management	NA
1397	1	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Upmigration	Habitat, Temperature_FW	Behaviour, Physiology_Condition	Environment,	Dispersal, Physiology
1398	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	Other_species	Juvenile	Environment, Habitat, Management	NA	Environment, , Management	NA
1399	NA	NA	NA	Review/MetaAnalysis	General	Freshwater_habitat, Upmigration	Flow, Management	NA	Environment, , Management	NA
1400	NA	British_Columbia	NA	Model	General	Juvenile	Habitat, Management, Methods	Habitat_Distribution	Environment, , Management	Dispersal
1401	10plus	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Marine	Density_Food, Ecosystem	Productivity	Species_interactions,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1402	NA	British_Columbia	British_Columbia_Fraser	Theoretical/ Opinion	O. nerka	General	Contaminants	Behaviour, Life_history, Physiology_Condition, Productivity	Environment,	Dispersal, Demography, Physiology
1403	1	California	California_N	Field/ RemoteSensing	O. mykiss	Juvenile	Density_Food, Flow, Prey	Behaviour, Habitat_Distribution	Species_interactions, Environment,	Dispersal
1404	1	Europe	NA	Field/ RemoteSensing	Other_species	Marine	Acidity, Density_Food, Prey	NA	Species_interactions, Environment,	NA
1405	NA	East_North_America, Europe	NA	Field/ RemoteSensing	S. salar	Population	Genetics, Habitat	Genetics_Adaptation	Evolution, Environment,	Evolution
1406	1	East_North_America	NA	Field/ RemoteSensing	S. salar	Juvenile	Flow, Temperature_ FW	Behaviour	Environment,	Dispersal
1407	1	East_North_America	NA	Field/ RemoteSensing	S. salar	Juvenile	Flow, Habitat, Temperature_ FW	Behaviour, Habitat_Distribution	Environment,	Dispersal
1408	1	Europe	NA	Lab/ Experimental	O. mykiss	Juvenile	Dissolved_oxygen, Temperature_ FW	Growth	Environment,	Physiology
1409	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Upmigration	Methods, Predators	Mortality	Species_interactions,	Demography
1410	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Outmigration	Methods, Temperature_ FW	Mortality	Environment,	Demography
1411	6to10	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Upmigration	Predators	Mortality	Species_interactions,	Demography
1412	NA	Northwest	Northwest_Columbia	Projections/ ecosystem, Review/ MetaAnalysis	Other_fish, Salmonid_ general	Juvenile	Invasives, Predators	Habitat_Distribution	Species_interactions,	Dispersal
1413	6to10	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha, Other_fish	Juvenile	Invasives, Predators, Temperature_ FW	Mortality	Species_interactions, Environment,	Demography
1414	10plus	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. keta	Upmigration	Flow, Management	Phenology	Environment, , Management	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1415	1	Europe	NA	Field/ RemoteSensing	S. trutta	General	Disease, Temperature_ FW	NA	Species_interactions, Environment,	NA
1416	2to5	Alaska	Alaska_W	Field/ RemoteSensing	O. mykiss, O. nerka	Spawning	Density_Food, Habitat, Temperature_ FW	Behaviour, Diet	Species_interactions, Environment,	Species_interactio ns, Dispersal
1417	10plus	British_Colum bia, Largescale	British_Columb ia_not_Fraser	Field/ RemoteSensing	O. gorbuscha, O. tshawytscha	Marine	Predators	NA	Species_interactions,	NA
1418	10plus	Alaska, British_Colum bia	Alaska_SE, British_Columb ia_Fraser, British_Columb ia_not_Fraser	Field/ RemoteSensing	O. gorbuscha, O. nerka	Marine	Density_Food	Maturation, Productivity	Species_interactions,	Demography, Physiology
1419	10plus	Largescale	NA	Field/ RemoteSensing	O. gorbuscha, O. keta, O. nerka	Marine	Density_Food	Productivity	Species_interactions,	Demography
1420	2to5	California	California_S	Field/ RemoteSensing	O. mykiss	Juvenile	Density_Food, Habitat, Temperature_ FW	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1421	10plus	Northwest	Northwest_Co astal	Field/ RemoteSensing	O. kisutch	Marine	Climate_indice s, Temperature_ marine	Productivity	Environment,	Demography
1422	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Juvenile, Marine	Climate_indice s, Contaminants, Management, Temperature_ FW	Carryover, Life_history, Maturation, Mortality, Phenology	Environment, , Management	Demography, Physiology
1423	10plus	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. kisutch, O. tshawytscha	Marine	Density_Food, Ecosystem	Mortality	Species_interactions,	Demography



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1424	10plus	Northwest	Northwest_Coastal	Field/RemoteSensing, Model	General, O. kisutch	Marine	Density_Food, Ecosystem, Environment, Prey, Temperature_marine	Productivity	Species_interactions, Environment,	Demography
1425	6to10	Northwest	Northwest_Coastal	Field/RemoteSensing, Model	General, Other_fish, Other_species	Marine	Density_Food, Ecosystem, Prey, Temperature_marine	Productivity	Species_interactions, Environment,	Demography
1426	2to5	Europe	NA	Field/RemoteSensing	Salmonid_general	Freshwater_habitat	Habitat, Management, Temperature_FW	NA	Environment, , Management	NA
1427	NA	California, Northwest	California_N, California_S, Northwest_Coastal	Model, Projections/physical	General	Marine	Ecosystem, Environment	Productivity	Species_interactions, Environment,	Demography
1428	2to5	East_North_America	NA	Field/RemoteSensing, Model	S. salar	Freshwater_habitat	Flow, Habitat, Methods, Temperature_FW	NA	Environment,	NA
1429	10plus	California	California_CV	Field/RemoteSensing	O. tshawytscha	Marine	Density_Food, Ecosystem, Environment, Prey, Temperature_marine	Growth, Mortality	Species_interactions, Environment,	Demography, Physiology
1430	10plus	California, Northwest	California_N, California_S, Northwest_Coastal	Field/RemoteSensing	O. tshawytscha	Marine	Density_Food, Ecosystem, Environment, Prey, Temperature_marine	Growth, Performance	Species_interactions, Environment,	Physiology
1431	NA	Northwest	Northwest_Puget_Sound	Theoretical/Opinion	Salmonid_general	Freshwater_habitat	Flow, Management	Population_resilience	Environment, , Management	Demography
1432	2to5	Japan	NA	Field/RemoteSensing	O. keta	Marine	Temperature_marine	Growth, Mortality	Environment,	Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1433	10plus	Japan	NA	Field/ RemoteSensing	O. keta	Juvenile, Marine	Management, Temperature_ marine	Mortality	Environment, , Management	Demography
1434	2to5	Europe	NA	Field/ RemoteSensing	S. trutta	Juvenile	Flow, Management	Habitat_Distribution	Environment, , Management	Dispersal
1435	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Juvenile	Density_Food, Flow, Habitat, Management	Growth, Productivity	Species_interactions, Environment, , Management	Demography, Physiology
1436	2to5	Europe	NA	Field/ RemoteSensing	S. salar	Marine	Disease, Fisheries, Temperature_ marine	NA	Species_interactions, Environment, , Management	NA
1437	NA	Europe	NA	Model, Projections/ salmon	S. trutta	Egg, Juvenile	Flow, Temperature_ FW	Habitat_Distribution, Life_history	Environment,	Dispersal, Demography
1438	10plus	California	California_N	Field/ RemoteSensing	O. tshawytscha, Other_fish	Marine	Density_Food, Prey, Temperature_ marine	NA	Species_interactions, Environment,	NA
1439	10plus	California	California_N	Field/ RemoteSensing	Other_species	Marine	Density_Food, Ecosystem, Temperature_ marine	NA	Species_interactions, Environment,	NA
1440	10plus	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Egg, Spawning, Upmigration	Flow, Management, Temperature_ FW	Mortality	Environment, , Management	Demography
1441	1	East_North_A merica	NA	Lab/ Experimental	O. mykiss	Juvenile, Upmigration	Contaminants, Dissolved_oxyg en, Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
1442	1	East_North_A merica	NA	Lab/ Experimental	O. mykiss	Juvenile	Contaminants, Dissolved_oxyg en, Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1443	2to5	British_Columbia, Northwest	British_Columbia_not_Fraser, Northwest_Puget_Sound	Field/RemoteSensing	O. tshawytscha	Marine	Predators	NA	Species_interactions,	NA
1444	10plus	California, Northwest	California_CV, California_N, Northwest_Puget_Sound	Field/RemoteSensing, Model	O. tshawytscha	Marine, Population	Climate_indices, Methods	Productivity	Environment,	Demography
1445	2to5	California	California_CV	Field/RemoteSensing, Model	O. mykiss	Population	Density_Food, Genetics, Temperature_FW	Growth, Life_history, Maturation, Mortality, Phenology	Species_interactions, Evolution, Environment,	Demography, Physiology
1446	10plus	California	California_CV	Field/RemoteSensing	O. tshawytscha	Marine	Climate_indices, Fisheries	Growth	Environment, , Management	Physiology
1447	10plus	Largescale	NA	Field/RemoteSensing	General	Juvenile	Flow	NA	Environment,	NA
1448	1	Alaska, Europe	Alaska_W	Lab/Experimental	Other_fish	Upmigration	Genetics, Temperature_FW	Genetics_Adaptation, Phenology	Evolution, Environment,	Demography, Evolution
1449	NA	California	California_N	Model	O. kisutch, O. tshawytscha	Upmigration	Disease, Flow, Management, Temperature_FW	Population_resilience	Species_interactions, Environment, , Management	Demography
1450	10plus	Northwest	Northwest_Puget_Sound	Field/RemoteSensing, Model	O. mykiss	Population	Climate_indices, Density_Food, Management	Population_resilience, Productivity	Species_interactions, Environment, , Management	Demography
1451	NA	NA	NA	Theoretical/Opinion	General	Evolution, Population	Habitat	Productivity	Environment,	Demography
1452	2to5	Europe	NA	Lab/Experimental	S. trutta	Juvenile, Spawning, Upmigration	Disease, Temperature_FW	Mortality, Performance	Species_interactions, Environment,	Demography, Physiology
1453	10plus	Largescale	NA	Field/RemoteSensing	Other_species	Marine	Climate_indices, Ecosystem	Mortality, Productivity	Species_interactions, Environment,	Demography
1454	10plus	East_North_America	NA	Field/RemoteSensing	Other_fish	Spawning	NA	Phenology		Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1455	2to5	Alaska	Alaska_W	Field/ RemoteSensing	O. gorbuscha, O. kisutch, O. tshawytscha, Other_fish, S. malma	Juvenile, Spawning	Density_Food, Ecosystem, Flow, Habitat, Predators, Prey	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1456	10plus	Alaska	Alaska_S	Field/ RemoteSensing, Review/ MetaAnalysis	O. tshawytscha	Freshwater_habitat, General	Environment, Flow, Habitat, Temperature_FW	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
1457	1	Europe	NA	Field/ RemoteSensing	Other_species	Juvenile	Density_Food, Flow, Management	NA	Species_interactions, Environment, , Management	NA
1458	NA	Alaska	Alaska_SE	Field/ RemoteSensing	O. kisutch	Evolution	Genetics, Habitat	Genetics_Adaptation, Habitat_Distribution	Evolution, Environment,	Dispersal, Evolution
1459	2to5	Alaska	Alaska_W	Field/ RemoteSensing	O. nerka	Marine, Outmigration	Genetics	Life_history, Phenology	Evolution,	Demography
1460	2to5	Northwest	Northwest_Coastal	Field/ RemoteSensing	General	Freshwater_habitat	Flow, Management	NA	Environment, , Management	NA
1461	2to5	Alaska, Russia	Alaska_S, Alaska_W	Field/ RemoteSensing	O. tshawytscha	Marine	Predators	Mortality	Species_interactions,	Demography
1462	10plus	British_Columbia	British_Columbia_not_Fraser	Field/ RemoteSensing	O. nerka, Other_fish	Juvenile	Ecosystem, Environment, Management, Temperature_FW	NA	Species_interactions, Environment, , Management	NA
1463	2to5	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Egg, Juvenile	Flow, Management	Mortality	Environment, , Management	Demography
1464	NA	NA	NA	Theoretical/ Opinion	O. mykiss, O. tshawytscha	Marine	Habitat, Management	Population_resilience	Environment, , Management	Demography
1465	10plus	Alaska	Alaska_SE	Field/ RemoteSensing	O. gorbuscha, O. keta, O. kisutch, O. nerka, S. malma	Juvenile, Spawning, Upmigration	Predators	Mortality, Phenology	Species_interactions,	Demography
1466	2to5	Alaska	Alaska_SE	Field/ RemoteSensing	O. gorbuscha, O. keta	Spawning, Upmigration	Density_Food, Dissolved_oxygen	Habitat_Distribution, Mortality, Performance	Species_interactions, Environment,	Dispersal, Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1467	NA	NA	NA	Review/ MetaAnalysis	General	Spawning	Dissolved_oxygen, Temperature_ FW	Physiology_Condition	Environment,	Physiology
1468	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. clarkii, S. confluentus	Freshwater_habitat, General	Environment, Habitat, Temperature_ FW	Habitat_Distribution	Environment,	Dispersal
1469	2to5	Alaska	Alaska_S	Field/ RemoteSensing	O. kisutch	Juvenile	Habitat	Behaviour, Habitat_Distribution	Environment,	Dispersal
1470	NA	Alaska	Alaska_S	Model, Projections/ physical	General, Salmonid_general	Freshwater_habitat	Habitat, Temperature_ FW	NA	Environment,	NA
1471	10plus	Europe	NA	Field/ RemoteSensing	S. salar, S. trutta	Freshwater_habitat	Acidity, Contaminants, Restoration	Productivity	Environment, , Management	Demography
1472	1	California	California_CV, California_S	Field/ RemoteSensing, Lab/ Experimental	O. mykiss	Juvenile	Disease	Mortality, Physiology_Condition	Species_interactions,	Demography, Physiology
1473	2to5	Northwest	Northwest_Coastal	Field/ RemoteSensing	Other_species	Marine	Density_Food, Temperature_ marine	Productivity	Species_interactions, Environment,	Demography
1474	NA	Alaska	Alaska_SE	Projections/ salmon	Salmonid_general	Juvenile, Spawning	Flow, Habitat, Temperature_ FW	Habitat_Distribution	Environment,	Dispersal
1475	NA	Alaska, British_Columbia	Alaska_SE, British_Columbia_not_Fraser	Review/ MetaAnalysis	General	Freshwater_habitat	Environment, Flow, Temperature_ FW	NA	Environment,	NA
1476	10plus	Largescale	NA	Field/ RemoteSensing, Model	O. tshawytscha	Marine	Climate_indices, Temperature_ marine	Productivity	Environment,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1477	10plus	British_Columbia, Northwest	British_Columbia_Fraser, British_Columbia_not_Fraser, Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Marine	NA	Behaviour, Habitat_Distribution, Life_history		Dispersal, Demography
1478	10plus	Largescale	NA	Field/RemoteSensing	O. tshawytscha	Marine	Climate_indices, Temperature_marine	Productivity	Environment,	Demography
1479	2to5	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. kisutch, O. nerka, O. tshawytscha	Outmigration	NA	Habitat_Distribution		Dispersal
1480	2to5	East_North_America	NA	Field/RemoteSensing	S. salar	Marine	Disease, Ecosystem, Habitat, Prey	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1481	2to5	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. clarkii	Juvenile	Density_Food, Flow	Growth, Mortality	Species_interactions, Environment,	Demography, Physiology
1482	10plus	Alaska, British_Columbia, California, Northwest	NA	Field/RemoteSensing, Model, Projections/salmon	O. tshawytscha	Marine	Temperature_marine	Habitat_Distribution	Environment,	Dispersal
1483	10plus	Largescale	NA	Field/RemoteSensing, Model	O. tshawytscha	Marine	Fisheries, Habitat	Habitat_Distribution	Environment, , Management	Dispersal
1484	10plus	Europe	NA	Field/RemoteSensing	S. salar	Marine	Climate_indices, Disease, Fisheries	Carryover, Mortality	Species_interactions, Environment, , Management	Demography
1485	6to10	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. kisutch, O. tshawytscha	Juvenile, Outmigration	Predators	Mortality	Species_interactions,	Demography
1486	NA	British_Columbia, California, Northwest	NA	Model, Projections/physical	General	Freshwater_habitat, Marine	Flow, Temperature_FW, Temperature_marine	NA	Environment,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1487	NA	Alaska, Russia	Alaska_S, Alaska_W	Field/RemoteSensing	O. keta	Population	Genetics	NA	Evolution,	NA
1488	1	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. kisutch, O. tshawytscha	Juvenile	Habitat	Behaviour, Habitat_Distribution	Environment,	Dispersal
1489	6to10	Russia	NA	Field/RemoteSensing	Salmonid_general	Marine	Ecosystem, Temperature_marine	Productivity	Species_interactions, Environment,	Demography
1490	10plus	Russia	NA	Field/RemoteSensing, Theoretical/Opinion	O. gorbuscha, O. keta, O. nerka, Salmonid_general	Marine	Density_Food, Temperature_marine	Growth, Productivity	Species_interactions, Environment,	Demography, Physiology
1491	NA	Russia	NA	Field/RemoteSensing, Theoretical/Opinion	O. gorbuscha, O. keta, O. nerka, Salmonid_general	Marine	Density_Food	Growth, Productivity	Species_interactions,	Demography, Physiology
1492	NA	NA	NA	Review/MetaAnalysis	S. salar	Juvenile	Density_Food, Habitat, Temperature_FW	Growth, Habitat_Distribution, Productivity	Species_interactions, Environment,	Dispersal, Demography, Physiology
1493	NA	California, Northwest	California_N, Northwest_Coastal	Projections/physical	General	Marine	Acidity, Dissolved_oxygen, Methods, Temperature_marine	NA	Environment,	NA
1494	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Upmigration	Fisheries, Flow, Habitat, Management, Temperature_FW	Behaviour, Mortality	Environment, , Management	Dispersal, Demography
1495	10plus	Alaska	Alaska_W	Field/RemoteSensing	O. tshawytscha	Marine	Fisheries, Genetics, Temperature_marine	Genetics_Adaptation, Growth, Maturation	Evolution, Environment, , Management	Evolution, Physiology
1496	10plus	Alaska	Alaska_W	Field/RemoteSensing	O. tshawytscha	Marine	Temperature_marine	Growth, Maturation	Environment,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1497	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Upmigration	Flow, Management, Temperature_FW	Behaviour, Mortality	Environment, , Management	Dispersal, Demography
1498	1	Europe	NA	Field/RemoteSensing	S. salar	Outmigration	Flow, Management	Behaviour	Environment, , Management	Dispersal
1499	2to5	Mountain_west	NA	Field/RemoteSensing	O. clarkii	Population	Flow	Population_resilience, Productivity	Environment,	Demography
1500	10plus	Europe	NA	Field/RemoteSensing	S. salar	Juvenile	Density_Food, Flow, Habitat, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
1501	10plus	Europe	NA	Field/RemoteSensing	S. salar	Outmigration	Dissolved_oxygen, Environment, Temperature_marine	Carryover, Growth, Mortality	Environment,	Demography, Physiology
1502	10plus	Europe	NA	Field/RemoteSensing	S. salar	Outmigration	Flow, Temperature_FW	Phenology	Environment,	Demography
1503	1	Australia_New Zealand	NA	Lab/Experimental	Other_fish	Marine	Acidity	Performance	Environment,	Physiology
1504	1	California	California_CV	Field/RemoteSensing	O. tshawytscha	Outmigration	Flow	Habitat_Distribution, Mortality	Environment,	Dispersal, Demography
1505	NA	Mountain_west	NA	Review/MetaAnalysis	O. clarkii, O. mykiss, S. confluentus	Population	Flow, Genetics, Habitat, Invasives, Temperature_FW	Population_resilience	Species_interactions, Evolution*, Environment,	Demography
1506	1	Europe	NA	Lab/Experimental	S. salar	Juvenile, Marine	Prey, Temperature_marine	Mortality, Physiology_Condition	Species_interactions, Environment,	Demography, Physiology
1507	6to10	Alaska	Alaska_SE	Field/RemoteSensing	O. gorbuscha	Marine	Environment, Prey	Growth	Species_interactions, Environment,	Physiology
1508	6to10	Europe	NA	Field/RemoteSensing	S. salar	Juvenile, Outmigration	Management	Phenology	, Management	Demography
1509	2to5	California	California_S	Field/RemoteSensing	O. mykiss	Juvenile, Upmigration	Temperature_FW	Behaviour, Habitat_Distribution	Environment,	Dispersal



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1510	NA	NA	NA	Review/ MetaAnalysis	Salmonid_ general	Spawning	Density_Food, Temperature_ FW	Growth, Maturation	Species_interactions, Environment,	Physiology
1511	NA	NA	NA	Review/ MetaAnalysis	S. salar, S. trutta	Egg, Spawning	Dissolved_oxyg en, Flow, Habitat, Temperature_ FW	Population_resilience	Environment,	Demography
1512	6to10	California	California_S	Field/ RemoteSensing	O. mykiss	Freshwater_ha bitat, Spawning	Environment, Habitat, Management	NA	Environment, , Management	NA
1513	NA	NA	NA	Theoretical/ Opinion	General	General	Management, Methods	Population_resilience	, Management	Demography
1514	2to5	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. tshawytscha	Spawning, Upmigration	Habitat	Habitat_Distribution	Environment,	Dispersal
1515	NA	Northwest	Northwest_Col umbia	Model	O. mykiss, O. tshawytscha	Upmigration	Habitat, Temperature_ FW	Behaviour, Habitat_Distribution, Physiology_Condition	Environment,	Dispersal, Physiology
1516	NA	British_Colum bia, Northwest	British_Columb ia_not_Fraser, Northwest_Pu get_Sound	Review/ MetaAnalysis	General	Marine	Acidity, Dissolved_oxyg en, Ecosystem, Environment, Temperature_ marine	NA	Species_interactions, Environment,	NA
1517	NA	British_Colum bia, Northwest	British_Columb ia_not_Fraser, Northwest_Pu get_Sound	Model	O. kisutch, O. mykiss, O. tshawytscha	Marine	Density_Food, Ecosystem, Environment, Habitat, Predators, Temperature_ marine	Mortality, Productivity	Species_interactions, Environment,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1518	10plus	British_Columbia, Northwest	British_Columbia_not_Fraser, Northwest_Puget_Sound	Field/RemoteSensing, Model	O. kisutch, O. tshawytscha	Marine	Climate_indices, Density_Food, Environment, Flow, Methods, Predators, Temperature_FW, Temperature_marine	Mortality	Species_interactions, Environment,	Demography
1519	10plus	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. mykiss	Marine	Climate_indices, Density_Food, Environment, Predators, Temperature_marine	Mortality	Species_interactions, Environment,	Demography
1520	2to5	California	California_CV, California_S	Field/RemoteSensing	O. mykiss	Juvenile	Habitat	Growth, Life_history, Phenology, Physiology_Condition	Environment,	Demography, Physiology
1521	NA	Europe	NA	Theoretical/Opinion	S. salar, S. trutta	Freshwater_habitat, General	Habitat, Management	Population_resilience	Environment, , Management	Demography
1522	NA	NA	NA	Theoretical/Opinion	Other_species	Juvenile	Density_Food	NA	Species_interactions,	NA
1523	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	O. clarkii, O. keta, O. kisutch, O. mykiss, O. nerka, O. tshawytscha	Outmigration	Contaminants, Habitat, Restoration	Habitat_Distribution	Environment, , Management	Dispersal
1524	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	Other_fish, Salmonid_general	Outmigration	Habitat, Invasives, Temperature_FW	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1525	NA	Northwest	Northwest_Coastal	Review/MetaAnalysis	General	Marine	Acidity	NA	Environment,	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1526	1	Europe	NA	Lab/ Experimental	General, Other_fish	Evolution, Juvenile, Upmigration	Dissolved_oxygen	Mortality, Performance, Physiology_Condition	Environment,	Demography, Physiology
1527	10plus	East_North_America	NA	Field/ RemoteSensing	S. salar	Marine	Management, Temperature_marine	Maturation, Productivity	Environment, , Management	Demography, Physiology
1528	1	California	California_N	Field/ RemoteSensing, Lab/ Experimental	O. tshawytscha	Juvenile	Disease	Immune, Physiology_Condition	Species_interactions,	Physiology
1529	1	Asia_other	NA	Lab/ Experimental	O. mykiss	Juvenile, Upmigration	Contaminants, Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
1530	1	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. kisutch	Juvenile	Contaminants, Habitat, Temperature_FW	Growth	Environment,	Physiology
1531	2to5	Alaska	Alaska_W	Model, Projections/ salmon	O. nerka	Egg	Temperature_FW	Phenology	Environment,	Demography
1532	NA	Alaska	Alaska_W	Lab/ Experimental	O. nerka	Egg	Temperature_FW	Genetics_Adaptation, Phenology	Environment,	Demography, Evolution
1533	10plus	Alaska, British_Columbia, Northwest	Alaska_SE, British_Columbia_not_Fraser, Northwest_Coastal	Field/ RemoteSensing	O. kisutch	Juvenile, Outmigration	Environment, Flow, Temperature_FW	Phenology	Environment,	Demography
1534	10plus	Largescale	NA	Field/ RemoteSensing	O. kisutch	Juvenile, Outmigration	Habitat	Phenology	Environment,	Demography
1535	10plus	Alaska	Alaska_W	Field/ RemoteSensing	O. gorbuscha	Marine	Ecosystem, Prey	NA	Species_interactions,	NA
1536	NA	California	California_CV	Model	General, O. tshawytscha	Freshwater_habitat, Juvenile	Ecosystem, Flow, Management, Methods	Behaviour, Habitat_Distribution	Species_interactions, Environment, , Management	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1537	6to10	Alaska	Alaska_W	Field/ RemoteSensing	O. gorbuscha, O. nerka	Marine	Density_Food, Ecosystem, Environment, Temperature_marine	Habitat_Distribution, Productivity	Species_interactions, Environment,	Dispersal, Demography
1538	10plus	Largescale	NA	Field/ RemoteSensing	O. gorbuscha, O. keta, O. nerka	Marine	Climate_indices	Habitat_Distribution, Productivity	Environment,	Dispersal, Demography
1539	2to5	California	California_N	Field/ RemoteSensing	Other_species	Juvenile	Density_Food, Habitat, Restoration	NA	Species_interactions, Environment, , Management	NA
1540	NA	Largescale	NA	Review/ MetaAnalysis	General	Freshwater_habitat, Marine	Ecosystem	Population_resilience	Species_interactions,	Demography
1541	2to5	California	California_CV	Field/ RemoteSensing, Model	O. tshawytscha	Outmigration	Habitat, Methods, Predators	Habitat_Distribution, Mortality	Species_interactions, Environment,	Dispersal, Demography
1542	10plus	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	General	Freshwater_habitat	Temperature_FW	Phenology, Population_resilience	Environment,	Demography
1543	NA	Northwest	Northwest_Coastal	Field/ RemoteSensing	O. kisutch	Juvenile	Habitat, Management, Temperature_FW	Habitat_Distribution	Environment, , Management	Dispersal
1544	NA	Northwest	Northwest_Columbia, Northwest_Puget_Sound	Theoretical/ Opinion	General	Freshwater_habitat	Management, Methods, Temperature_FW	NA	Environment, , Management	NA
1545	NA	Largescale	NA	Model, Projections/ ecosystem	General	Marine	NA	Productivity		Demography
1546	1	Europe	NA	Field/ RemoteSensing	S. trutta	Evolution	Genetics, Habitat	Genetics_Adaptation, Morphology	Evolution, Environment,	Evolution, Physiology
1547	NA	NA	NA	Review/ MetaAnalysis	General	General	Ecosystem, Methods	NA	Species_interactions,	NA
1548	NA	California	California_N	Review/ MetaAnalysis	O. kisutch	Juvenile	Management, Temperature_FW	Growth, Physiology_Condition	Environment, , Management	Physiology
1549	1	East_North_America	NA	Lab/ Experimental	O. tshawytscha	Egg, Spawning	NA	Mortality, Performance		Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1550	10plus, 2	California	California_CV	Field/ RemoteSensing	General	Freshwater_habitat	Flow, Management	Livelihood	Environment, Management	Management
1551	10plus	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. tshawytscha	Marine	Predators	NA	Species_interactions,	NA
1552	6to10	East_North_America	NA	Field/ RemoteSensing	S. salar	Outmigration	Flow, Management	Phenology, Physiology_Condition	Environment, Management	Demography, Physiology
1553	10plus	Europe	NA	Field/ RemoteSensing	Other_species	Juvenile	Environment, Temperature_FW	NA	Environment,	NA
1554	6to10	Europe	NA	Field/ RemoteSensing	O. tshawytscha	Marine	Disease, Environment, Methods, Temperature_marine	Mortality	Species_interactions, Environment,	Demography
1555	1	East_North_America	NA	Lab/ Experimental	S. fontinalis	Evolution, Juvenile	Temperature_FW	Genetics_Adaptation, Performance, Physiology_Condition	Environment,	Evolution, Physiology
1556	10plus	California, Northwest	California_N, Northwest_Coastal	Field/ RemoteSensing, Model	Other_fish	Marine	Fisheries, Methods	Mortality	, Management	Demography
1557	NA	Northwest	Northwest_Columbia	Theoretical/ Opinion	O. tshawytscha	Outmigration	Management, Methods	Behaviour, Mortality	, Management	Dispersal, Demography
1558	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. clarkii, O. mykiss	General	Genetics, Temperature_FW	Genetics_Adaptation, Growth, Life_history	Evolution, Environment,	Demography, Evolution, Physiology
1559	2to5	California	California_N	Field/ RemoteSensing	O. tshawytscha	Upmigration	Dissolved_oxygen, Temperature_FW	Behaviour, Habitat_Distribution	Environment,	Dispersal
1560	6to10	California	California_N	Field/ RemoteSensing	O. tshawytscha	Upmigration	Disease, Habitat, Temperature_FW	Behaviour, Habitat_Distribution	Species_interactions, Environment,	Dispersal
1561	1	Europe	NA	Lab/ Experimental	S. salar	Marine, Outmigration	Density_Food, Environment	Growth, Physiology_Condition	Species_interactions, Environment,	Physiology
1562	6to10	East_North_America, Europe	NA	Field/ RemoteSensing	S. salar	Marine	Predators	Mortality	Species_interactions,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1563	6to10	Europe	NA	Field/ RemoteSensing	S. salar	Marine	Temperature_ marine	Habitat_Distribution	Environment,	Dispersal
1564	2to5	East_North_America	NA	Field/ RemoteSensing, Model	S. salar	Juvenile, Marine	Density_Food, Environment, Temperature_ FW	Behaviour, Phenology	Species_interactions, Environment,	Dispersal, Demography
1565	1	British_Columbia	British_Columbia_Fraser, British_Columbia_not_Fraser	Lab/ Experimental	O. mykiss	Juvenile	Dissolved_oxygen, Genetics, Temperature_ FW	Mortality, Physiology_Condition	Evolution*, Environment,	Demography, Physiology
1566	1	East_North_America	NA	Lab/ Experimental	O. tshawytscha	Egg, Spawning	Dissolved_oxygen, Flow, Temperature_ FW	Carryover, Mortality, Physiology_Condition	Environment,	Demography, Physiology
1567	10plus	Alaska	Alaska_SE	Field/ RemoteSensing	Other_fish, Salmonid_general	Marine	Predators, Prey, Temperature_ marine	Mortality	Species_interactions, Environment,	Demography
1568	10plus	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile, Upmigration	Flow, Genetics, Management	Genetics_Adaptation, Phenology	Evolution, Environment, , Management	Demography, Evolution
1569	6to10	Northwest	Northwest_Coastal	Field/ RemoteSensing	Other_species	Marine	Ecosystem, Environment	NA	Species_interactions, Environment,	NA
1570	NA	NA	NA	Model, Theoretical/ Opinion	General	Freshwater_habitat, General, Population	Habitat	Population_resilience	Environment,	Demography
1571	6to10	Alaska, British_Columbia, California, Largescale, Northwest	NA	Field/ RemoteSensing	O. tshawytscha	Population	Management	Habitat_Distribution, Population_resilience, Productivity	, Management	Dispersal, Demography
1572	NA	NA	NA	Review/ MetaAnalysis	General	Evolution, General	Ecosystem	Genetics_Adaptation	Species_interactions,	Evolution

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1573	NA	NA	NA	Review/ MetaAnalysis, Theoretical/ Opinion	General	Freshwater_habitat	Habitat, Temperature_ FW	NA	Environment,	NA
1574	6to10	California	California_N	Field/ RemoteSensing	O. tshawytscha	Juvenile, Upmigration	Flow, Management	Genetics_Adaptation, Phenology	Environment, , Management	Demography, Evolution
1575	10plus	California	California_N	Field/ RemoteSensing, Lab/ Experimental	O. kisutch, O. mykiss, O. tshawytscha, Other_fish, S. trutta	Outmigration, Spawning	Flow, Habitat, Management	Behaviour, Phenology	Environment, , Management	Dispersal, Demography
1576	NA	Europe	NA	Model, Projections/ salmon	S. salar	Juvenile	Flow, Management, Temperature_ FW	Productivity	Environment, , Management	Demography
1577	2to5	Europe	NA	Field/ RemoteSensing	Other_fish, S. trutta	Freshwater_habitat, Juvenile	Flow, Habitat	Habitat_Distribution	Environment,	Dispersal
1578	6to10	Alaska	Alaska_S, Alaska_SE	Field/ RemoteSensing	General	Marine	Ecosystem, Temperature_ marine	NA	Species_interactions, Environment,	NA
1579	2to5	British_Columbia	British_Columbia_Fraser	Lab/ Experimental	O. mykiss	Juvenile	Genetics, Temperature_ FW	Physiology_Condition	Evolution*, Environment,	Physiology
1580	2to5	California	California_N	Field/ RemoteSensing	O. kisutch	Juvenile, Upmigration	Habitat, Temperature_ FW	Behaviour, Habitat_Distribution	Environment,	Dispersal
1581	1	Europe	NA	Field/ RemoteSensing	Other_fish, S. salar, S. trutta	Juvenile	Disease	Physiology_Condition	Species_interactions,	Physiology
1582	10plus	Europe	NA	Field/ RemoteSensing	Other_fish, S. salar, S. trutta	Population	Fisheries, Temperature_ FW	Habitat_Distribution, Productivity	Environment, , Management	Dispersal, Demography
1583	1	Northwest	Northwest_Columbia	Field/ RemoteSensing, Lab/ Experimental	O. tshawytscha	Juvenile	Habitat, Management	Behaviour	Environment, , Management	Dispersal
1584	2to5	British_Columbia	Northwest_Columbia	Field/ RemoteSensing	O. nerka	Juvenile	Flow, Habitat	Behaviour, Growth, Habitat_Distribution	Environment,	Dispersal, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1585	10plus	California	California_CV, California_N	Field/ RemoteSensing	O. tshawytscha	Marine	Climate_indices, Ecosystem, Environment	Productivity	Species_interactions, Environment,	Demography
1586	10plus	Alaska	Alaska_W	Field/ RemoteSensing	O. gorbuscha	Marine	Density_Food	Productivity	Species_interactions,	Demography
1587	10plus	California	California_N	Field/ RemoteSensing	General	Marine	Climate_indices, Environment, Temperature_marine	NA	Environment,	NA
1588	1	British_Columbia	British_Columbia_Fraser	Lab/ Experimental	O. tshawytscha	Outmigration	Temperature_FW	Behaviour, Phenology, Physiology_Condition	Environment,	Dispersal, Demography, Physiology
1589	NA	East_North_America	NA	Field/ RemoteSensing	S. salar	Evolution	Genetics, Temperature_FW	Genetics_Adaptation, Habitat_Distribution	Evolution, Environment,	Dispersal, Evolution
1590	2to5	Europe	NA	Field/ RemoteSensing	O. mykiss, Other_fish, S. fontinalis	Juvenile	Disease, Genetics	Physiology_Condition	Species_interactions, Evolution,	Physiology
1591	1	Europe	NA	Field/ RemoteSensing, Model	S. salar	Outmigration	Flow, Methods	Behaviour, Phenology	Environment,	Dispersal, Demography
1592	2to5	Europe	NA	Field/ RemoteSensing	S. salar, S. trutta	Juvenile	Management	Behaviour, Habitat_Distribution, Life_history, Phenology	, Management	Dispersal, Demography
1593	2to5	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. nerka, O. tshawytscha	Juvenile	Invasives, Predators	Mortality	Species_interactions,	Demography
1594	1	East_North_America	NA	Lab/ Experimental	O. mykiss	Juvenile	Flow	Behaviour, Performance, Physiology_Condition	Environment,	Dispersal, Physiology
1595	10plus	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile	Flow, Habitat	Growth, Habitat_Distribution	Environment,	Dispersal, Physiology



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1596	NA	British_Columbia	British_Columbia_not_Fraser	Review/ MetaAnalysis	General	Marine	Acidity, Dissolved_oxygen, Ecosystem, Fisheries, Management, Temperature_marine	Population_resilience, Productivity	Species_interactions, Environment, , Management	Demography
1597	1	Japan	NA	Lab/ Experimental	O. mykiss	Evolution	Genetics, Temperature_FW	Genetics_Adaptation, Performance	Evolution, Environment,	Evolution, Physiology
1598	6to10	California	California_S	Field/ RemoteSensing	Other_fish	Marine	Predators, Temperature_marine	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1599	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	General	Freshwater_habitat	Flow, Habitat, Temperature_FW	NA	Environment,	NA
1600	10plus	California, East_North_America, Mountain_west, Northwest	NA	Field/ RemoteSensing	General	Freshwater_habitat	Flow	NA	Environment,	NA
1601	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. mykiss	Outmigration	Management	Behaviour, Carryover	, Management	Dispersal, Demography
1602	1	Europe	NA	Lab/ Experimental	Other_fish, S. trutta	General	Temperature_FW	Performance	Environment,	Physiology
1603	10plus	East_North_America	NA	Field/ RemoteSensing	S. salar	Spawning, Upmigration	Flow, Habitat	Behaviour, Performance	Environment,	Dispersal, Physiology
1604	10plus	Northwest	Northwest_Coastal, Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Marine	Habitat	Habitat_Distribution, Phenology	Environment,	Dispersal, Demography
1605	1	British_Columbia	British_Columbia_Fraser	Field/ RemoteSensing, Lab/ Experimental	O. tshawytscha	Upmigration	Disease, Fisheries, Temperature_FW	Behaviour, Mortality	Species_interactions, Environment, , Management	Dispersal, Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1606	1	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Marine, Upmigration	Disease, Fisheries, Temperature_FW	Mortality	Species_interactions, Environment, , Management	Demography
1607	1	British_Columbia	British_Columbia_Fraser	Lab/Experimental	O. kisutch	Upmigration	Disease, Fisheries, Temperature_FW	Mortality	Species_interactions, Environment, , Management	Demography
1608	1	Europe	NA	Lab/Experimental	S. salar	Juvenile	Density_Food, Flow	Growth	Species_interactions, Environment, , Management	Physiology
1609	10plus	Europe	NA	Field/RemoteSensing, Model	S. salar	Outmigration	Management, Methods, Temperature_FW	Phenology	Environment, , Management	Demography
1610	NA	British_Columbia, Northwest	NA	Review/MetaAnalysis, Theoretical/Opinion	General	Marine	Fisheries, Management	NA	, Management	NA
1611	NA	NA	NA	Review/MetaAnalysis	General, Other_fish, Salmonid_general	Egg	Temperature_FW	Morphology, Phenology	Environment, , Management	Demography, Physiology
1612	10plus	Largescale	NA	Field/RemoteSensing	O. kisutch	Marine	Habitat, Temperature_FW	Mortality, Productivity	Environment, , Management	Demography
1613	1	Asia_other	NA	Lab/Experimental	O. mykiss	Juvenile, Upmigration	Contaminants, Temperature_FW	Physiology_Condition	Environment, , Management	Physiology
1614	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Marine	Prey, Temperature_marine	Growth, Physiology_Condition	Species_interactions, Environment, , Management	Physiology
1615	10plus	California	California_CV, California_N, California_S	Field/RemoteSensing	O. tshawytscha	Marine	Prey, Temperature_marine	Mortality, Productivity	Species_interactions, Environment, , Management	Demography
1616	1	Europe	NA	Lab/Experimental	S. salar	Marine	Methods	Growth	Environment, , Management	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1617	10plus	California, Northwest	California_N, Northwest_Coastal	Field/RemoteSensing	General	Marine	Density_Food, Ecosystem, Prey, Temperature_marine	NA	Species_interactions, Environment,	NA
1618	1	Europe	NA	Lab/Experimental	S. salar	Marine	Acidity, Disease	NA	Species_interactions, Environment,	NA
1619	2to5	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. mykiss	Juvenile, Marine, Outmigration	NA	Carryover, Growth, Mortality		Demography, Physiology
1620	2to5	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. mykiss	Juvenile	Density_Food, Temperature_FW	Carryover, Growth, Mortality	Species_interactions, Environment,	Demography, Physiology
1621	NA	California	California_CV, California_N	Field/RemoteSensing	O. tshawytscha	Spawning	Genetics	Genetics_Adaptation, Phenology	Evolution,	Demography, Evolution
1622	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing, Lab/Experimental	O. mykiss	Egg, Juvenile, Spawning	Temperature_FW	Carryover, Growth, Morphology, Phenology	Environment,	Demography, Physiology
1623	6to10	Northwest	California_N, Northwest_Coastal	Field/RemoteSensing	O. tshawytscha	Marine	Density_Food, Ecosystem, Predators, Prey	Growth, Mortality	Species_interactions,	Demography, Physiology
1624	10plus	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. nerka	Upmigration	Climate_indices, Environment, Temperature_marine	Phenology, Physiology_Condition	Environment,	Demography, Physiology
1625	1	East_North_America	NA	Lab/Experimental	O. tshawytscha	Egg	Genetics, Temperature_FW	Carryover, Genetics_Adaptation, Growth, Morphology	Evolution, Environment,	Demography, Evolution, Physiology
1626	1	East_North_America	NA	Lab/Experimental	O. tshawytscha	Egg	Prey	Carryover, Growth, Morphology, Physiology_Condition	Species_interactions,	Demography, Physiology
1627	NA	California	California_CV, California_N, California_S	Model, Projections/physical	General	Freshwater_habitat	Flow, Management	NA	Environment, , Management	NA
1628	NA	NA	NA	Theoretical/Opinion	General	Freshwater_habitat	Management, Restoration	NA	, Management	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1629	NA	NA	NA	Review/ MetaAnalysis	General	Population	Density_Food	Growth, Life_history, Productivity	Species_interactions,	Demography, Physiology
1630	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Egg, Juvenile	Density_Food, Habitat	Habitat_Distribution, Productivity	Species_interactions, Environment,	Dispersal, Demography
1631	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile, Marine, Outmigration	Acidity, Contaminants	Carryover, Growth, Mortality, Physiology_Condition	Environment,	Demography, Physiology
1632	1	East_North_America	NA	Lab/ Experimental	O. tshawytscha	Evolution, Juvenile, Upmigration	Genetics	Genetics_Adaptation, Phenology, Physiology_Condition	Evolution*,	Demography, Evolution, Physiology
1633	10plus	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Population, Spawning	Methods	Productivity		Demography
1634	NA	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing, Lab/ Experimental, Review/ MetaAnalysis	O. kisutch	Upmigration	Contaminants	Mortality	Environment,	Demography
1635	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Juvenile, Outmigration	Habitat, Management	Habitat_Distribution	Environment, , Management	Dispersal
1636	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Juvenile	Habitat	Behaviour, Habitat_Distribution	Environment,	Dispersal
1637	NA	Northwest	Northwest_Columbia	Review/ MetaAnalysis	O. tshawytscha	Population	Management	Population_resilience, Productivity	, Management	Demography
1638	10plus	Alaska	Alaska_W	Field/ RemoteSensing	O. nerka	Spawning, Upmigration	Density_Food, Dissolved_oxygen, Flow	Mortality	Species_interactions, Environment,	Demography
1639	NA	NA	NA	Theoretical/ Opinion	General	Juvenile, Spawning, Upmigration	Fisheries	Genetics_Adaptation, Mortality, Phenology	, Management	Demography, Evolution
1640	10plus	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. nerka	Juvenile, Spawning, Upmigration	Genetics, Management	Genetics_Adaptation, Phenology	Evolution, , Management	Demography, Evolution
1641	NA	NA	NA	Review/ MetaAnalysis	Salmonid_general	Upmigration	Environment, Habitat, Management	Phenology	Environment, , Management	Demography
1642	10plus	East_North_America	NA	Field/ RemoteSensing	S. salar	Marine	NA	Growth, Maturation, Mortality, Productivity		Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1643	NA	NA	NA	Review/ MetaAnalysis	General, Other_fish, Salmonid_ general	Freshwater_ha bitat	Habitat, Restoration, Temperature_ FW	NA	Environment, , Management	NA
1644	1	East_North_A merica	NA	Field/ RemoteSensing	General, Other_fish	Freshwater_ha bitat	Habitat, Restoration, Temperature_ FW	NA	Environment, , Management	NA
1645	NA	NA	NA	Review/ MetaAnalysis	General	General	Ecosystem, Environment, Management	Population_resilience	Species_interactions, Environment, , Management	Demography
1646	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Juvenile, Marine, Population, Spawning	Temperature_ marine	Carryover, Life_history, Maturation, Phenology, Physiology_Condition	Environment,	Demography, Physiology
1647	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Marine	Temperature_ marine	Growth	Environment,	Physiology
1648	NA	Northwest	NA	Model, Projections/ physical	General	Freshwater_ha bitat	Flow	NA	Environment,	NA
1649	6to10	Northwest	Northwest_Col umbia	Field/ RemoteSensing	O. tshawytscha	Juvenile, Marine	Density_Food, Prey	Growth, Mortality	Species_interactions,	Demography, Physiology
1650	NA	California, Northwest	California_N, California_S, Northwest_Co astal	Model, Review/ MetaAnalysis	General	Marine	Ecosystem, Management, Methods	NA	Species_interactions, , Management	NA
1651	NA	Europe	NA	Field/ RemoteSensing	S. salar	Evolution, Juvenile	Disease	Genetics_Adaptation, Immune	Species_interactions,	Evolution, Physiology
1652	NA	California	California_N	Field/ RemoteSensing	O. kisutch	Juvenile	Environment, Flow, Habitat, Management	Population_resilience	Environment, , Management	Demography
1653	NA	Alaska	Alaska_S	Review/ MetaAnalysis, Theoretical/ Opinion	Salmonid_ general	Population	Ecosystem, Fisheries, Management, Methods	Population_resilience	Species_interactions, , Management	Demography
1654	10plus	Europe	NA	Model	General	General	Methods	Growth		Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1655	2to5	Mountain_west	NA	Lab/Experimental	O. clarkii, O. mykiss, Other_fish	Juvenile	Acidity	Mortality	Environment,	Demography
1656	10plus	Europe	NA	Field/RemoteSensing	S. salar	Marine	NA	Carryover, Growth, Life_history, Maturation		Demography, Physiology
1657	10plus	Europe	NA	Field/RemoteSensing	S. salar	Marine	Climate_indices, Density_Food, Ecosystem	Mortality, Productivity	Species_interactions, Environment,	Demography
1658	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. nerka	Marine	Environment, Flow, Management, Temperature_FW	Population_resilience, Productivity	Environment, Management	Demography
1659	1	East_North_America	NA	Lab/Experimental	S. fontinalis	Juvenile, Upmigration	Contaminants, Temperature_FW	Performance	Environment,	Physiology
1660	1	Asia_other	NA	Lab/Experimental	Other_fish	Spawning	Temperature_FW	Performance, Physiology_Condition	Environment,	Physiology
1661	1	Asia_other	NA	Lab/Experimental	O. mykiss	Juvenile	Density_Food	Growth	Species_interactions,	Physiology
1662	1	British_Columbia	British_Columbia_Fraser, British_Columbia_not_Fraser	Field/RemoteSensing	O. kisutch	Egg	Habitat, Temperature_FW	Habitat_Distribution	Environment,	Dispersal
1663	10plus	British_Columbia	British_Columbia_Fraser, British_Columbia_not_Fraser	Field/RemoteSensing	O. kisutch	Egg, Spawning	Habitat, Temperature_FW	Genetics_Adaptation, Life_history, Morphology	Environment,	Demography, Evolution*, Physiology
1664	6to10	California	California_N	Field/RemoteSensing, Model	O. kisutch, O. tshawytscha	Juvenile	Disease, Flow, Management	Mortality	Species_interactions, Environment, Management	Demography
1665	10plus	Europe	NA	Field/RemoteSensing	S. salar, S. trutta	Population	Genetics	Productivity	Evolution*,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1666	1	East_North_America	NA	Field/RemoteSensing	O. tshawytscha	Spawning	Flow, Temperature_FW	Behaviour, Performance, Physiology_Condition	Environment,	Dispersal, Physiology
1667	1	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. mykiss	Upmigration	Disease, Flow, Habitat	Mortality, Performance	Species_interactions, Environment,	Demography, Physiology
1668	1	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. mykiss	Upmigration	Fisheries	Mortality, Performance, Physiology_Condition	, Management	Demography, Physiology
1669	NA	Northwest	Northwest_Columbia	Review/MetaAnalysis	General	Freshwater_habitat	Flow, Habitat, Management	NA	Environment, , Management	NA
1670	NA	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss, O. tshawytscha	Upmigration	Habitat, Temperature_FW	Habitat_Distribution	Environment,	Dispersal
1671	10plus	Alaska	Alaska_S	Field/RemoteSensing	O. nerka	Juvenile, Outmigration	Density_Food, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
1672	1	Mountain_west	NA	Lab/Experimental	O. clarkii	Juvenile	Temperature_FW	Performance	Environment,	Physiology
1673	10plus	Asia_other	NA	Field/RemoteSensing	O. keta	Marine	Climate_indices, Density_Food, Environment, Fisheries	Growth, Maturation	Species_interactions, Environment, , Management	Physiology
1674	NA	Largescale	NA	Review/MetaAnalysis	General	General	Management	Population_resilience	, Management	Demography
1675	NA	Largescale	NA	Field/RemoteSensing, Model, Projections/physical, Review/MetaAnalysis	General	Freshwater_habitat, General	Acidity, Dissolved_oxygen, Environment, Fisheries, Flow, Temperature_FW	NA	Environment, , Management	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1676	NA	Largescale	NA	Review/ MetaAnalysis	General	Freshwater_habitat, General	Acidity, Dissolved_oxygen, Environment, Fisheries, Temperature_FW	NA	Environment, , Management	NA
1677	2to5	Mountain_west	NA	Field/ RemoteSensing	O. clarkii	Juvenile	Flow, Temperature_FW	Growth	Environment,	Physiology
1678	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Marine	Density_Food, Ecosystem, Prey	Growth, Physiology_Condition	Species_interactions,	Physiology
1679	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Marine	Density_Food, Ecosystem, Prey	Growth, Mortality	Species_interactions,	Demography, Physiology
1680	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Evolution, Juvenile, Population	Genetics, Management	Life_history, Maturation	Evolution, , Management	Demography, Physiology
1681	1	East_North_America	NA	Field/ RemoteSensing	S. fontinalis, S. trutta	Juvenile	Habitat, Temperature_FW	Habitat_Distribution	Environment,	Dispersal
1682	10plus	Europe	NA	Field/ RemoteSensing	S. salar	Evolution, Spawning, Upmigration	Climate_indices, Genetics	Genetics_Adaptation, Maturation, Population_resilience	Evolution, Environment,	Demography, Evolution, Physiology
1683	NA	NA	NA	Theoretical/ Opinion	General	General	Environment	NA	Environment,	NA
1684	2to5	Europe	NA	Lab/ Experimental	Other_species	Juvenile	Genetics, Temperature_FW	Genetics_Adaptation, Performance	Evolution, Environment,	Evolution, Physiology
1685	NA	Europe	NA	Lab/ Experimental	Other_species	Juvenile	Genetics, Temperature_FW	Genetics_Adaptation, Performance	Evolution, Environment,	Evolution, Physiology
1686	2to5	Europe	NA	Lab/ Experimental	Other_species	Juvenile	Genetics, Temperature_FW	Genetics_Adaptation, Performance	Evolution, Environment,	Evolution, Physiology
1687	2to5	Northwest	Northwest_Columbia	Field/ RemoteSensing	O. tshawytscha	Juvenile	Density_Food, Temperature_FW	Behaviour	Species_interactions, Environment,	Dispersal



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1688	10plus	California	California_N	Field/ RemoteSensing	O. kisutch	Freshwater_habitat	Flow, Management	NA	Environment, Management	NA
1689	6to10	East_North_America	NA	Field/ RemoteSensing	S. salar	Upmigration	Fisheries, Flow, Temperature_FW	Mortality, Physiology_Condition	Environment, Management	Demography, Physiology
1690	NA	East_North_America, Europe	NA	Review/ MetaAnalysis	S. salar	Upmigration	Fisheries, Temperature_FW	Mortality	Environment, Management	Demography
1691	6to10	California	California_N	Field/ RemoteSensing	O. kisutch	Juvenile	Flow, Habitat	NA	Environment,	NA
1692	NA	Northwest	Northwest_Columbia	Model, Projections/ physical	General	Freshwater_habitat	Flow	NA	Environment,	NA
1693	1	East_North_America	NA	Lab/ Experimental	S. salar	Marine, Outmigration	Temperature_FW, Temperature_marine	Performance, Physiology_Condition	Environment,	Physiology
1694	2to5	Alaska	Alaska_W	Field/ RemoteSensing	O. keta	Juvenile, Marine	NA	Growth, Habitat_Distribution, Phenology		Dispersal, Demography, Physiology
1695	2to5	Europe	NA	Field/ RemoteSensing	S. salar	Juvenile, Upmigration	Habitat, Management	Behaviour	Environment, Management	Dispersal
1696	1	Australia_New Zealand	NA	Lab/ Experimental	Other_fish	Marine	Genetics, Temperature_FW	Genetics_Adaptation, Performance	Evolution, Environment,	Evolution, Physiology
1697	1	British_Columbia	British_Columbia_not_Fraser	Lab/ Experimental	O. tshawytscha	Egg, Juvenile, Spawning	Genetics	Carryover, Genetics_Adaptation	Evolution,	Demography, Evolution
1698	1	Northwest	Northwest_Columbia	Field/ RemoteSensing, Model	General	Freshwater_habitat	Flow, Habitat, Restoration	NA	Environment, Management	NA
1699	1	California	California_CV	Lab/ Experimental	O. mykiss	Evolution, Juvenile	Genetics, Temperature_FW	Genetics_Adaptation, Performance	Evolution, Environment,	Evolution, Physiology
1700	NA	South_America	NA	Projections/ salmon	O. mykiss	Freshwater_habitat	Habitat, Temperature_FW	Habitat_Distribution	Environment,	Dispersal

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1701	1	Europe	NA	Lab/ Experimental	S. salar	Marine, Outmigration	Dissolved_oxygen, Temperature_marine	Growth, Physiology_Condition	Environment,	Physiology
1702	1	East_North_America	NA	Field/ RemoteSensing	S. salar	Evolution	Genetics, Habitat, Temperature_FW	Genetics_Adaptation	Evolution, Environment,	Evolution
1703	NA	NA	NA	Model	General	Population	Methods	Population_resilience, Productivity		Demography
1704	NA	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile	Flow, Temperature_FW	Mortality	Environment,	Demography
1705	2to5	Alaska	Alaska_W	Field/ RemoteSensing	Other_species	Marine	NA	Habitat_Distribution		Dispersal
1706	NA	Europe	NA	Model	S. salar	Marine, Outmigration, Upmigration	Disease	Growth, Mortality	Species_interactions,	Demography, Physiology
1707	NA	Europe	NA	Theoretical/ Opinion	S. salar	Marine	Disease, Management	Population_resilience	Species_interactions, , Management	Demography
1708	10plus	Alaska	Alaska_W	Field/ RemoteSensing	O. nerka, Other_fish	Juvenile	Density_Food, Environment, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
1709	10plus	Largescale	NA	Field/ RemoteSensing	General, Other_species	Marine	Climate_indices, Density_Food, Environment, Temperature_marine	NA	Species_interactions, Environment,	NA
1710	2to5	Alaska	Alaska_W	Field/ RemoteSensing	O. tshawytscha	Upmigration	Temperature_FW	Physiology_Condition	Environment,	Physiology
1711	2to5	Alaska	Alaska_S	Field/ RemoteSensing	Other_fish	Marine	Density_Food, Ecosystem, Temperature_marine	NA	Species_interactions, Environment,	NA
1712	NA	Alaska	Alaska_S, Alaska_SE, Alaska_W	Theoretical/ Opinion	General	Freshwater_habitat	Habitat, Management	NA	Environment, , Management	NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1713	NA	Northwest	Northwest_Columbia	Field/RemoteSensing, Model, Projections/salmon	O. mykiss	Evolution, Population	Flow, Habitat, Temperature_FW	Population_resilience	Environment,	Demography
1714	NA	Northwest	Northwest_Columbia, Northwest_Puget_Sound	Model, Projections/salmon	O. mykiss	Population	Flow, Habitat, Management, Temperature_FW	Population_resilience	Environment, , Management	Demography
1715	NA	NA	NA	Model	General	Freshwater_habitat	Ecosystem	NA	Species_interactions,	NA
1716	NA	Northwest	Northwest_Columbia	Model, Projections/physical	General	Freshwater_habitat	Flow	NA	Environment,	NA
1717	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. kisutch	Marine, Population	Climate_indices, Ecosystem, Environment, Management, Methods, Temperature_marine	Mortality, Productivity	Species_interactions, Environment, , Management	Demography
1718	NA	Northwest	Northwest_Columbia	Review/MetaAnalysis	O. kisutch	Freshwater_habitat, General	Environment, Flow, Habitat, Temperature_FW, Temperature_marine	Population_resilience	Environment,	Demography
1719	1	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	General	Juvenile	Density_Food, Ecosystem, Environment, Habitat	NA	Species_interactions, Environment,	NA
1720	6to10	Europe	NA	Field/RemoteSensing	S. trutta	General	Disease	Population_resilience	Species_interactions,	Demography
1721	NA	Alaska	Alaska_S	Field/RemoteSensing	Salmonid_general	Freshwater_habitat	Ecosystem, Habitat, Management	Livelihood	Species_interactions, Environment, , Management	Management

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1722	2to5	Mountain_west	NA	Field/RemoteSensing	O. clarkii, Other_fish	Juvenile	Environment, Temperature_FW	Physiology_Condition	Environment,	Physiology
1723	NA	NA	NA	Review/MetaAnalysis	Salmonid_general	General	Density_Food, Ecosystem, Management, Predators	NA	Species_interactions, , Management	NA
1724	10plus	Alaska	Alaska_W	Field/RemoteSensing	O. kisutch	Upmigration	Climate_indices	Phenology	Environment,	Demography
1725	10plus	Mountain_west	NA	Field/RemoteSensing	Other_fish	Juvenile	Flow, Management	Habitat_Distribution	Environment, , Management	Dispersal
1726	6to10	Alaska	Alaska_S	Field/RemoteSensing	O. nerka	Juvenile	Habitat, Temperature_FW	Behaviour, Carryover, Habitat_Distribution, Productivity	Environment,	Dispersal, Demography
1727	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing, Model, Projections/salmon	O. tshawytscha	Juvenile	Flow, Management, Temperature_FW	Mortality	Environment, , Management	Demography
1728	10plus	British_Columbia	British_Columbia_Fraser, British_Columbia_not_Fraser	Field/RemoteSensing	O. gorbuscha, O. keta, O. nerka, O. tshawytscha	Marine	Fisheries, Management	Mortality, Population_resilience, Productivity	, Management	Demography
1729	NA	Alaska	Alaska_W	Model, Projections/physical	General	Marine	Environment, Temperature_marine	NA	Environment,	NA
1730	10plus	Alaska	Alaska_W	Model, Projections/physical	General	Marine	Environment, Temperature_marine	NA	Environment,	NA
1731	1	California	California_N	Field/RemoteSensing	O. mykiss	Juvenile	Habitat, Temperature_FW	Habitat_Distribution	Environment,	Dispersal
1732	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Juvenile	Genetics, Management	Growth, Life_history, Phenology	Evolution, , Management	Demography, Physiology
1733	NA	NA	NA	Theoretical/Opinion	General	Evolution	Fisheries, Genetics	Genetics_Adaptation, Life_history, Maturation	Evolution, , Management	Demography, Evolution, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1734	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	General	Freshwater_habitat	Flow, Habitat	NA	Environment,	NA
1735	10plus	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. tshawytscha	Egg, Juvenile, Population, Spawning	Climate_indices, Flow	Mortality, Productivity	Environment,	Demography
1736	10plus	Alaska	Alaska_S	Field/RemoteSensing	O. gorbuscha, O. nerka, O. tshawytscha	Marine	Contaminants, Density_Food, Ecosystem, Environment, Temperature_marine	Productivity	Species_interactions, Environment,	Demography
1737	2to5	British_Columbia	NA	Field/RemoteSensing	O. mykiss	Juvenile	Density_Food, Temperature_FW	Growth, Maturation	Species_interactions, Environment,	Physiology
1738	10plus	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. tshawytscha	Marine	Methods, Predators	Mortality	Species_interactions,	Demography
1739	NA	Mountain_west	NA	Field/RemoteSensing	S. confluentus, S. fontinalis	Juvenile	Invasives, Temperature_FW	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1740	10plus	East_North_America	NA	Field/RemoteSensing	S. fontinalis	Spawning	Temperature_FW	Performance, Phenology	Environment,	Demography, Physiology
1741	1	East_North_America	NA	Lab/Experimental	O. tshawytscha	Egg, Juvenile	Temperature_FW	Growth, Mortality, Physiology_Condition	Environment,	Demography, Physiology
1742	1	East_North_America	NA	Lab/Experimental	O. tshawytscha	Egg, Juvenile	Temperature_FW	Carryover, Performance, Physiology_Condition	Environment,	Demography, Physiology
1743	10plus	California	California_N	Field/RemoteSensing	Other_fish, Other_species	Marine	Density_Food, Predators	Mortality	Species_interactions,	Demography
1744	NA	Largescale	NA	Review/MetaAnalysis	General	Marine	Ecosystem, Environment	NA	Species_interactions, Environment,	NA
1745	10plus	Alaska, Japan	Alaska_W	Field/RemoteSensing	O. gorbuscha, O. keta	Marine	Density_Food, Prey	Productivity	Species_interactions,	Demography
1746	1	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Upmigration	Habitat, Methods	Behaviour, Habitat_Distribution, Mortality	Environment,	Dispersal, Demography
1747	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing, Lab/Experimental	O. tshawytscha	Spawning	Genetics, Management	Genetics_Adaptation, Growth, Mortality, Physiology_Condition	Evolution, , Management	Demography, Evolution, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1748	2to5	East_North_America	NA	Field/RemoteSensing	S. salar	Population	Environment, Genetics, Habitat	Genetics_Adaptation	Evolution, Environment,	Evolution
1749	NA	NA	NA	Review/MetaAnalysis	S. salar	General	Ecosystem, Fisheries, Flow, Management	Livelihood	Species_interactions, Environment, , Management	Management
1750	1	Japan	NA	Lab/Experimental	S. malma	Juvenile	Density_Food, Habitat, Temperature_FW	Growth, Habitat_Distribution	Species_interactions, Environment,	Dispersal, Physiology
1751	NA	NA	NA	Review/MetaAnalysis	Other_fish, Salmonid_general	Juvenile	Flow, Habitat, Temperature_FW	Habitat_Distribution	Environment,	Dispersal
1752	10plus	Europe	NA	Field/RemoteSensing	Other_fish	Spawning	Temperature_FW	Mortality, Phenology	Environment,	Demography
1753	2to5	East_North_America	NA	Field/RemoteSensing	O. mykiss	Juvenile	Fisheries, Habitat, Temperature_FW	Habitat_Distribution	Environment, , Management	Dispersal
1754	1	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. tshawytscha	Marine	Disease	NA	Species_interactions,	NA
1755	10plus	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. keta	Egg, Juvenile, Outmigration	Flow, Temperature_FW	Mortality, Phenology	Environment,	Demography
1756	2to5	East_North_America	NA	Field/RemoteSensing	S. trutta	Evolution	Genetics, Management	Genetics_Adaptation	Evolution, , Management	Evolution
1757	10plus	Largescale	NA	Field/RemoteSensing	O. tshawytscha	Marine	Fisheries, Habitat	Habitat_Distribution	Environment, , Management	Dispersal
1758	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss, O. tshawytscha	Marine, Outmigration	Genetics, Management	Growth, Phenology	Evolution* , Management	Demography, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1759	10plus	British_Columbia, California, Northwest	British_Columbia_Fraser, British_Columbia_not_Fraser, California_CV, Northwest_Coastal, Northwest_Columbia, Northwest_Puget_Sound	Field/RemoteSensing	O. tshawytscha	Marine, Population	Management, Methods, Restoration	Mortality, Productivity	, Management	Demography
1760	1	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. mykiss	Evolution	Genetics, Habitat, Temperature_FW	Genetics_Adaptation	Evolution, Environment,	Evolution
1761	1	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing, Lab/Experimental	O. mykiss	Evolution	Genetics, Habitat	Genetics_Adaptation	Evolution, Environment,	Evolution
1762	NA	California	California_CV	Review/MetaAnalysis, Theoretical/Opinion	O. tshawytscha, Salmonid_general	Marine	Ecosystem, Management	Population_resilience	Species_interactions, Management	Demography
1763	10plus	California	California_CV, California_N, California_S	Field/RemoteSensing	O. kisutch, O. tshawytscha	Marine	Density_Food, Environment, Temperature_marine	Growth, Mortality	Species_interactions, Environment,	Demography, Physiology
1764	NA	California	California_CV, California_N	Review/MetaAnalysis	O. tshawytscha	Marine	Climate_indices, Density_Food, Ecosystem, Temperature_marine	Growth, Mortality	Species_interactions, Environment,	Demography, Physiology
1765	10plus	California	California_N	Field/RemoteSensing	O. tshawytscha	Marine	Density_Food, Ecosystem, Predators	Mortality	Species_interactions,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1766	10plus	Northwest	Northwest_Columbia, Northwest_Columbia	Field/RemoteSensing, Model	General	Freshwater_habitat	Flow, Methods	NA	Environment,	NA
1767	NA	Mountain_west	NA	Model, Projections/salmon	O. clarkii, S. fontinalis, S. trutta	Juvenile, Population	Flow, Habitat, Invasives, Temperature_FW	Habitat_Distribution, Population_resilience	Species_interactions, Environment,	Dispersal, Demography
1768	NA	Northwest	Northwest_Columbia	Model, Projections/salmon	S. confluentus	General	Flow, Habitat, Temperature_FW	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
1769	1	Alaska	Alaska_W	Field/RemoteSensing	O. keta	Upmigration	Disease, Temperature_FW	Mortality, Phenology	Species_interactions, Environment,	Demography
1770	10plus	Alaska	Alaska_W	Field/RemoteSensing	O. nerka	General, Population	Ecosystem	Productivity	Species_interactions,	Demography
1771	NA	Alaska	Alaska_S, Alaska_SE, Alaska_W	Review/MetaAnalysis	Salmonid_general	General	Fisheries, Management	Livelihood, Population_resilience	, Management	Demography, Management
1772	10plus	Largescale	NA	Model	O. nerka	Population	NA	Maturation, Population_resilience, Productivity		Demography, Physiology
1773	NA	Northwest	Northwest_Columbia	Review/MetaAnalysis	Salmonid_general	Freshwater_habitat	Habitat, Restoration	Population_resilience	Environment, , Management	Demography
1774	1	British_Columbia	British_Columbia_Fraser	Lab/Experimental	O. nerka	Egg, Upmigration	Genetics, Temperature_FW	Genetics_Adaptation, Mortality	Evolution, Environment,	Demography, Evolution
1775	1	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing, Lab/Experimental	O. nerka	Egg, Juvenile	Temperature_FW	Genetics_Adaptation, Mortality, Phenology	Environment,	Demography, Evolution
1776	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Upmigration	Fisheries, Temperature_FW	Mortality	Environment, , Management	Demography



Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1777	NA	Northwest	Northwest_Columbia	Model	General	Freshwater_habitat	Density_Food, Environment, Habitat, Management, Restoration, Temperature_FW	NA	Species_interactions, Environment, Management	NA
1778	NA	NA	NA	Review/MetaAnalysis	General	General, Population	Ecosystem	Habitat_Distribution, Population_resilience	Species_interactions,	Dispersal, Demography
1779	2to5	East_North_America	NA	Field/RemoteSensing	S. fontinalis, S. salar	Juvenile	Habitat, Temperature_FW	Habitat_Distribution	Environment,	Dispersal
1780	NA	NA	NA	Theoretical/Opinion	General	Freshwater_habitat	Management, Methods	Population_resilience	, Management	Demography
1781	1	Australia_New Zealand	NA	Lab/Experimental	O. mykiss	Juvenile, Spawning	Environment, Temperature_FW	Maturation	Environment,	Physiology
1782	10plus	California, Mountain_west, Northwest	NA	Field/RemoteSensing	General	Freshwater_habitat, General	Flow, Habitat	NA	Environment,	NA
1783	2to5	Northwest	Northwest_Puget_Sound	Lab/Experimental	O. kisutch	Marine	Acidity	Behaviour, Performance	Environment,	Dispersal, Physiology
1784	NA	Northwest	Northwest_Columbia	Review/MetaAnalysis	O. tshawytscha	Evolution, Juvenile	Habitat, Management	Genetics_Adaptation, Phenology	Environment, Management	Demography, Evolution
1785	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. nerka	Juvenile, Marine	Climate_indices, Flow, Temperature_FW	Productivity	Environment,	Demography
1786	2to5	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	Other_fish	Marine	Predators	Habitat_Distribution	Species_interactions,	Dispersal
1787	10plus	California	California_CV, California_N	Field/RemoteSensing	General	Freshwater_habitat	Habitat, Temperature_FW	NA	Environment,	NA
1788	1	California	California_CV	Field/RemoteSensing	O. tshawytscha	Juvenile, Upmigration	Methods	Growth, Habitat_Distribution		Dispersal, Physiology
1789	NA	NA	NA	Theoretical/Opinion	General	General	Methods	NA		NA

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1790	10plus	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	O. clarkii, O. gorbuscha, O. kisutch, O. mykiss, S. malma	General, Population	Climate_indices, Density_Food, Environment, Flow, Habitat, Temperature_FW	Life_history, Productivity	Species_interactions, Environment,	Demography
1791	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing	O. mykiss	Juvenile, Marine	Density_Food, Ecosystem	Growth, Phenology	Species_interactions,	Demography, Physiology
1792	1	Northwest	Northwest_Puget_Sound	Lab/Experimental	Other_species	Marine	Acidity	Productivity	Environment,	Demography
1793	1	Northwest	Northwest_Coastal	Field/RemoteSensing	O. mykiss	Evolution	Genetics	Genetics_Adaptation, Habitat_Distribution	Evolution,	Dispersal, Evolution
1794	6to10	Northwest	Northwest_Columbia	Field/RemoteSensing	General	Freshwater_habitat	Environment, Flow, Habitat, Temperature_FW	NA	Environment,	NA
1795	2to5	Alaska	Alaska_SE	Model	General	Freshwater_habitat	Temperature_FW	NA	Environment,	NA
1796	1	California	California_CV	Lab/Experimental	O. tshawytscha	Juvenile, Spawning	Density_Food, Genetics, Temperature_FW	Maturation	Species_interactions, Evolution, Environment,	Physiology
1797	NA	Northwest	Northwest_Columbia	Field/RemoteSensing	General	Juvenile	Acidity, Dissolved_oxygen, Habitat, Temperature_FW	NA	Environment,	NA
1798	NA	California	California_N	Theoretical/Opinion	Salmonid_general	Juvenile	Flow, Management	NA	Environment, , Management	NA
1799	NA	California, Northwest	California_N, California_S, Northwest_Coastal	Model, Projections/ecosystem	Other_species	Marine	Ecosystem, Environment, Predators, Temperature_marine	Productivity	Species_interactions, Environment,	Demography
1800	1	East_North_America	NA	Field/RemoteSensing	O. mykiss	Juvenile	Habitat, Temperature_FW	Behaviour, Mortality	Environment,	Dispersal, Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1801	10plus	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	General, O. tshawytscha	Marine	Contaminants, Dissolved_oxygen, Ecosystem, Environment, Fisheries, Methods	Productivity	Species_interactions, Environment, , Management	Demography
1802	1	East_North_America	NA	Lab/Experimental	Other_species	Marine	Acidity, Ecosystem	Genetics_Adaptation, Productivity	Species_interactions, Environment, ,	Demography, Evolution
1803	2to5	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. keta, O. kisutch, O. tshawytscha, Other_species	Juvenile, Outmigration	Density_Food, Habitat, Prey, Restoration	Habitat_Distribution	Species_interactions, Environment, , Management	Dispersal
1804	6to10	Northwest	Northwest_Puget_Sound	Field/RemoteSensing	O. tshawytscha	Juvenile, Outmigration	Density_Food, Habitat, Prey, Restoration	Habitat_Distribution, Life_history	Species_interactions, Environment, , Management	Dispersal, Demography
1805	10plus	British_Columbia	Northwest_Columbia	Field/RemoteSensing, Model	O. mykiss, O. nerka	Juvenile	Density_Food, Ecosystem, Flow, Management	Productivity	Species_interactions, Environment, , Management	Demography
1806	NA	NA	NA	Model, Theoretical/Opinion	S. salar	General	Density_Food, Management, Temperature_FW, Temperature_marine	Population_resilience	Species_interactions, Environment, , Management	Demography
1807	NA	NA	NA	Model	O. tshawytscha, Salmonid_general	Population	NA	Life_history, Maturation, Productivity		Demography, Physiology
1808	10plus	Europe	NA	Field/RemoteSensing, Projections/salmon	S. salar	Freshwater_habitat	Acidity	Productivity	Environment, ,	Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1809	NA	Northwest	Northwest_Coastal, Northwest_Columbia, Northwest_Puget_Sound	Model, Projections/physical	General	Freshwater_habitat	Flow, Temperature_FW	NA	Environment,	NA
1810	1	Asia_other	NA	Lab/Experimental	O. mykiss	Outmigration	Environment	Growth, Physiology_Condition	Environment,	Physiology
1811	6to10	East_North_America	NA	Field/RemoteSensing	S. fontinalis	Juvenile	Density_Food, Flow, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
1812	2to5	East_North_America	NA	Field/RemoteSensing	S. fontinalis	Juvenile	Density_Food, Flow, Temperature_FW	Growth	Species_interactions, Environment,	Physiology
1813	1	Asia_other	NA	Lab/Experimental	O. tshawytscha	Egg	Disease	Physiology_Condition	Species_interactions,	Physiology
1814	1	Asia_other	NA	Lab/Experimental	O. tshawytscha	Egg	Disease	Physiology_Condition	Species_interactions,	Physiology
1815	10plus	British_Columbia	British_Columbia_Fraser	Field/RemoteSensing	O. tshawytscha	Marine, Population	Climate_indices, Environment, Flow	Growth	Environment,	Physiology
1816	10plus	British_Columbia	British_Columbia_not_Fraser	Field/RemoteSensing	Other_fish	Marine	Climate_indices, Fisheries	Productivity	Environment, , Management	Demography
1817	1	Japan	NA	Field/RemoteSensing, Lab/Experimental	O. masou	Juvenile	Flow, Habitat	Genetics_Adaptation, Morphology	Environment,	Evolution, Physiology
1818	2to5	Japan	NA	Lab/Experimental	O. masou	Egg, Juvenile	Genetics	Carryover, Growth, Life_history, Physiology_Condition	Evolution,	Demography, Physiology
1819	1	Asia_other	NA	Lab/Experimental	Other_fish	General, Juvenile	Temperature_FW	Behaviour, Performance	Environment,	Dispersal, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1820	NA	California	NA	Theoretical/ Opinion	General	General	Ecosystem, Flow, Management, Methods	NA	Species_interactions, NA Environment, , Management	
1821	NA	California	California_CV	Model	General	Freshwater_ha bitat	Flow, Management	Population_resilience	Environment, , Management	Demography
1822	10plus	Alaska	Alaska_W	Field/ RemoteSensing	O. tshawytscha	Marine	Environment, Prey, Temperature_ marine	Growth	Species_interactions, Environment,	Physiology
1823	10plus	Alaska	Alaska_W	Field/ RemoteSensing	O. gorbuscha, O. keta, O. nerka, Other_fish	Marine	Density_Food, Ecosystem, Temperature_ marine	Habitat_Distribution	Species_interactions, Environment,	Dispersal
1824	10plus	California	California_CV	Field/ RemoteSensing, Model	O. tshawytscha	Egg, Freshwater_ha bitat, Juvenile, Spawning	Flow, Temperature_ FW	Population_resilience	Environment,	Demography
1825	10plus	Largescale	NA	Field/ RemoteSensing, Model	General	Marine	Ecosystem	Productivity	Species_interactions,	Demography
1826	NA	NA	NA	Model	Salmonid_ general	Upmigration	Density_Food	Behaviour, Habitat_Distribution, Population_resilience, Productivity	Species_interactions,	Dispersal, Demography
1827	1	Asia_other	NA	Lab/ Experimental	O. mykiss	Juvenile	Dissolved_oxygen, Temperature_ FW	Performance, Physiology_Condition	Environment,	Physiology
1828	1	Alaska	NA	Field/ RemoteSensing, Lab/ Experimental	O. keta, O. tshawytscha	Marine	Fisheries, Management, Methods	Mortality	, Management	Demography
1829	2to5	Australia_New Zealand	NA	Field/ RemoteSensing	S. trutta	Upmigration	Flow, Temperature_ FW	Behaviour, Mortality	Environment,	Dispersal, Demography

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1830	10plus	Northwest	Northwest_Columbia, Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	Marine	Temperature_marine	Habitat_Distribution	Environment,	Dispersal
1831	1	Asia_other	NA	Lab/Experimental	Other_fish	General, Marine	Disease, Temperature_FW	Performance, Physiology_Condition	Species_interactions, Environment,	Physiology
1832	2to5	Europe	NA	Lab/Experimental	General	Juvenile	Temperature_FW	Growth	Environment,	Physiology
1833	10plus	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. tshawytscha	Population	Climate_indices, Habitat, Predators, Temperature_marine	Life_history, Maturation, Mortality, Population_resilience, Productivity	Species_interactions, Environment,	Demography, Physiology
1834	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing, Model	O. mykiss, O. tshawytscha	Upmigration	Flow, Management, Methods, Temperature_FW	Behaviour, Performance	Environment, , Management	Dispersal, Physiology
1835	2to5	Northwest	Northwest_Columbia	Field/RemoteSensing	O. tshawytscha	General, Juvenile	Methods	Growth		Physiology
1836	1	East_North_America	NA	Lab/Experimental	S. salar	Juvenile	Dissolved_oxygen, Temperature_FW	Immune, Physiology_Condition	Environment,	Physiology
1837	2to5	California	California_CV	Field/RemoteSensing	General, O. tshawytscha	Juvenile	Flow, Management, Temperature_FW	Growth, Population_resilience	Environment, , Management	Demography, Physiology
1838	6to10	Russia	NA	Field/RemoteSensing	Other_fish, Other_species, Salmonid_general	Marine	Density_Food, Prey	Growth	Species_interactions,	Physiology
1839	6to10	Russia	NA	Field/RemoteSensing	O. keta, Other_fish, Other_species, Salmonid_general	Marine	Density_Food, Prey	Growth	Species_interactions,	Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1840	1	Europe	NA	Lab/ Experimental	S. salar	Juvenile	Prey	Growth, Performance, Physiology_Condition	Species_interactions,	Physiology
1841	10plus	Mountain_west	NA	Field/ RemoteSensing	O. clarkii	General, Population	Flow, Temperature_FW	Habitat_Distribution, Population_resilience	Environment,	Dispersal, Demography
1842	NA	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile	Habitat, Management	Population_resilience	Environment, , Management	Demography
1843	10plus	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile, Outmigration	Flow, Management, Temperature_FW	Behaviour, Mortality, Phenology	Environment, , Management	Dispersal, Demography
1844	2to5	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Juvenile, Outmigration	Flow, Habitat	Mortality	Environment,	Demography
1845	NA	California	California_CV	Field/ RemoteSensing	O. tshawytscha	Population	Flow, Habitat, Restoration	Population_resilience	Environment, , Management	Demography
1846	6to10	California	California_CV	Model	O. tshawytscha	Population	Flow, Management, Methods, Temperature_FW	Life_history, Population_resilience, Productivity	Environment, , Management	Demography
1847	NA	Northwest	Northwest_Columbia	Model, Projections/salmon	O. mykiss, O. tshawytscha	Juvenile, Outmigration	Flow, Management, Temperature_FW	Mortality	Environment, , Management	Demography
1848	NA	Largescale	NA	Model, Projections/physical	General	Freshwater_habitat	Flow	NA	Environment,	NA
1849	NA	California	California_CV, California_N, California_S	Review/ MetaAnalysis	O. tshawytscha	General	Genetics, Management, Temperature_FW	Mortality, Physiology_Condition	Evolution, Environment, , Management	Demography, Physiology
1850	10plus	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing	O. tshawytscha	Juvenile	Density_Food, Flow	Life_history, Mortality	Species_interactions, Environment,	Demography
1851	1	Northwest	Northwest_Puget_Sound	Field/ RemoteSensing, Lab/ Experimental	O. kisutch, Other_fish	Juvenile	Dissolved_oxygen, Environment, Flow, Management	Behaviour, Growth	Environment, , Management	Dispersal, Physiology

Citation number	Duration	Region	Subregion	Type of study	Species	Life stage	Driver	Response	Driver Process	Response Process
1852	10plus	East_North_America	NA	Field/ RemoteSensing	S. fontinalis, S. trutta, Salmonid_general	Juvenile	Density_Food, Habitat	Growth, Habitat_Distribution	Species_interactions, Environment,	Dispersal, Physiology
1853	1	East_North_America	NA	Lab/ Experimental	S. salar	Juvenile, Outmigration	Environment, Temperature_FW	Phenology, Physiology_Condition	Environment,	Demography, Physiology

Evolution\* indicates that it was labeled as an evolutionar process but does not involve genetic analyses



**Index Citation**

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- 1 Abadia-Cardoso, A., D. E. Pearse, S. Jacobson, J. Marshall, D. Dalrymple, F. Kawasaki, G. Ruiz-Campos, and J. C. Garza. 2016. Population genetic structure and ancestry of steelhead/rainbow trout (*Oncorhynchus mykiss*) at the extreme southern edge of their range in North America. *Conservation Genetics* 17:675-689.
- 2 Abadia-Cardoso, A., R. Hernandez-Guzman, A. Varela-Romero, J. C. Garza, and F. J. Garcia-De Leon. 2021. Population genetics and species distribution modeling highlight conservation needs of the endemic trout from the
- 3 Abdul-Aziz, O. I., N. J. Mantua, and K. W. Myers. 2011. Potential climate change impacts on thermal habitats of Pacific salmon (*Oncorhynchus* spp.) in the North Pacific Ocean and adjacent seas. *Canadian Journal of Fisheries*
- 4 Abe, T. K., T. Kitagawa, Y. Makiguchi, and K. Sato. 2019. Chum salmon migrating upriver adjust to environmental temperatures through metabolic compensation. *Journal of Experimental Biology* 222:10.
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