

Winter Lake Monitoring Project Elements Table

Parameter ID	Parameter	Method and Equipment	Frequency/Timing	Sampling Locations	Protocol citation(s)
a	Channel depth	Manual stream cross sections at 6 permanent plots	Annually in Aug. 2018-2021	See Project Design: Photo Points and Channel Monitoring	Roegner et al. 2008.
a	Connectivity	Aerial drone flight	Annually in Sept. 2018-2021	Video and imagery of entire site	Smith et al. 2016, Peterson et al. 2015, Roegner et al. 2008.
a	Tide gate door open	7 electronic sensors (1 in each tide gate)	Continually, 5-min interval 2018-2021	See Maps: Project Site for tide gate location	BSDD and Coos Watershed, personal communication
a	Velocity in tide gates	3 SonTek loggers in sub sample of tide gates	Continually, 5-min interval 2018-2021	See Maps: Project Site for tide gate location	Coos Watershed Association, personal communication
b	Channel complexity	Aerial drone flight	Annually in Sept. 2018-2021	Video and imagery of entire site	Smith et al. 2016, Peterson et al. 2015, Roegner et al. 2008.
b	Channel stability	Aerial drone flight and 9 on the ground photo points	Annually in Sept. 2018-2021	Video and imagery of entire site. See Project Design: Photo Points and Channel Monitoring .	Smith et al. 2016, Peterson et al. 2015, Roegner et al. 2008.
c	Surface water and ground water level	17 water level loggers throughout the site	Continually, 15-min interval 2018-21	See Project Design: Water Quality and Level	Roegner et al. 2008.
d	Water Quality (TN)	6 water samples, TKN+Nitrate +Nitrite, Lab Analysis	April, June, Aug. 2018-2021	See Project Design: Water Quality and Level , one reference, one in Unit 1 and 3, two in Unit 2	DEQ 2009, USDA 2003
d	Water Quality (TP)	6 water samples, Lab Analysis	April, June, Aug. 2018-2021	See Project Design: Water Quality and Level , one reference, one in Unit 1 and 3, two in Unit 2	DEQ 2009, USDA 2003

Parameter ID	Parameter	Method and Equipment	Frequency/Timing	Sampling Locations	Protocol citation(s)
d	Water Quality (TSS)	6 water samples, Lab Analysis	April, June, Aug. 2018-2021	See <u>Project Design: Water Quality and Level</u> , one reference, one in Unit 1 and 3, two in Unit 2	DEQ 2009, USDA 2003
d	Dissolved Oxygen and Temperature	7 HOBO Dissolved oxygen and temperature loggers	Continually, 15-min interval 2018-21	See <u>Project Design: Water Quality and Level</u> , one reference, one in Unit 1, two in Unit 2 and 3	Roegner et al. 2008.
e	Vegetation Composition and Survival	Vegetation survival plots	Annually in Sept. 2019-2021	Stratified random sampling	Coos Watershed Association 2003, Coquille Watershed Association 2003, USDA 1999
e	Vegetation Composition and Survival	Photo points, 7 points in addition to the vegetation captured in channel stability photos	Annually in Sept. 2019-2021	See <u>Project Design: Photo Points and Channel Monitoring</u>	Coos Watershed Association 2003, Coquille Watershed Association 2003, USDA 1999
f	Relative fish abundance	Trapping with hoop nets	Seasonally from Nov – April, weekly basis, 2018-2021	See <u>Project Design: Juvenile Salmon Monitoring Proposal</u>	ODFW 2015, Lebreton et al. 2009
f	Condition factor and survival	PIT tagging to obtain MR and change in condition	Seasonally from Nov – April, weekly basis, 2018-2021	See <u>Project Design: Juvenile Salmon Monitoring Proposal</u>	ODFW 2015, Lebreton et al. 2009