AN ATLAS OF BATHYMETRIC DATA IN THE VICINITY OF FINFISH AQUACULTURE FARMS IN SOUTHWEST NEW BRUNSWICK

Susan P. Haigh, Mitchell P.A. O'Flaherty-Sproul, Fred H. Page

Fisheries and Oceans Canada
Saint Andrews Biological Station
125 Marine Science Drive
St Andrews, NB
E5B 0E4

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Susan P. Haigh[1], Mitchell P. A. O'Flaherty-Sproul[1], Fred H. Page[1]

[1]Fisheries and Oceans Canada
Saint Andrews Biological Station
125 Marine Science Drive
St Andrews, NB
E3B 0E4

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ABSTRACT

Haigh, S.P., O'Flaherty-Sproul, M.P.A., Page, F.H. 2026. An Atlas of Bathymetric Data in the Vicinity of Finfish Aquaculture Farms in Southwest New Brunswick. Can. Tech. Rep. Fish. Aquat. Sci. 3765: ix + 209 p. https://doi.org/10.60825/0y06-4j88

The study presents an analysis of bathymetric data surrounding licensed finfish aquaculture farms in southwest New Brunswick, Canada. Utilizing three datasets: New Brunswick lidar data, University of New Brunswick Ocean Mapping Group data, and Canadian Hydrographic Services data. The lidar data offers high-resolution bathymetry of intertidal zones, while the multibeam data provides detailed coverage of coastal areas, and the CHS data spans the broader Bay of Fundy region. The lease boundaries for licenced finfish aquaculture sites were obtained from the Government of New Brunswick Department of Agriculture, Aquaculture and Fisheries. For each farm, the lease boundary was used to calculate the lease area and depth ranges within the lease boundary, a 500 m buffer from the lease boundary, and a 5 km buffer from the lease boundary. The analysis emphasizes the spatial and depth coverage of these datasets, focusing on intertidal zones and water depth. Examining the data within the buffers around aquaculture sites enables assessment of their utility for modeling. The findings provide foundational data for future research and decision-making regarding aquaculture in the region.

RÉSUMÉ

Haigh, S.P., O'Flaherty-Sproul, M.P.A., Page, F.H. 2026. An Atlas of Bathymetric Data in the Vicinity of Finfish Aquaculture Farms in Southwest New Brunswick. Can. Tech. Rep. Fish. Aquat. Sci. 3765: ix + 209 p. https://doi.org/10.60825/0y06-4j88

L'étude présente une analyse des données bathymétriques autour des fermes piscicoles autorisées dans le sud-ouest du Nouveau-Brunswick, au Canada. Trois ensembles de données ont été utilisés : les données LIDAR du Nouveau-Brunswick, les données du groupe de cartographie océanique de l'Université du Nouveau-Brunswick et les données du Service hydrographique du Canada (SHC). Les données LIDAR fournissent une bathymétrie à haute résolution des zones intertidales, les données multifaisceaux présentent une couverture détaillée des zones côtières et les données du SHC couvrent la région plus vaste de la baie de Fundy. Les limites de concession des sites de pisciculture autorisés ont été obtenues auprès du ministère de l'Agriculture, de l'Aquaculture et des Pêches du gouvernement du Nouveau-Brunswick. Pour chaque ferme, les limites de concession ont été utilisées pour calculer la zone de concession et les plages de profondeurs à l'intérieur de ces limites ainsi que deux zones tampons, une de 500 mètres et une de 5 kilomètres à partir des limites de concession. L'analyse met l'accent sur la couverture spatiale et la profondeur de ces ensembles de données, plus particulièrement sur les zones intertidales et la profondeur de l'eau. L'examen des données dans les zones tampons autour des sites d'aquaculture permet d'évaluer leur utilité pour la modélisation. Les résultats fournissent des données fondamentales pour les études et les prises de décisions futures concernant l'aquaculture dans la région.

1 Introduction

Open net pen finfish aquaculture has been present in New Brunswick, Canada for over 40 years (New Brunswick Department of Agriculture, Aquaculture and Fisheries 2020). Currently there are over 90 licensed aquaculture sites in New Brunswick. The sites are primarily located in the Passamaquoddy Bay and Fundy Isles region, the east coast of Grand Manan, and along the eastern shore between Passamaquoddy Bay and Saint John, NB (Figure 1.1).

The presence of finfish farms in New Brunswick, Canada, has the potential to impact the surrounding environment. These impacts include the deposition of organic material, heavy metals, and drugs onto the sea bed; the contamination of the water column through the release of anti-parasitic pesticides and anti-microbial chemicals; the interaction of escaped farm fish with wild populations; the impact of farm infrastructure on local water currents; and the effect on aquatic populations.

Modeling these environmental interactions is a critical area of research, employing a wide range of models. Among these, hydrodynamic models and deposition models are highly dependent on the spatial resolution and accuracy of bathymetric data to accurately predict the temporal and spatial patterns. Similarly, models assessing the benthic footprint of aquaculture rely on detailed bathymetric information to characterize the predicted footprint on released particulates.

This report focuses on bathymetric data in the vicinity of coastal marine aquaculture fishfarms in the southwest New Brunswick area of the Bay of Fundy. Multiple datasets were obtained, analyzed, and compared, with a subset excluded due to issues such as inadequate spatial resolution, internal inconsistencies, or misalignment between datasets. While some of the data available from multibeam and lidar-based approaches can be utilized for purposes beyond water depth measurement, these aspects were not examined or included in the work completed for this report. The three high-quality datasets considered in this report, comprised New Brunswick (NB) lidar data, multibeam data from the Ocean Mapping Group (OMG) at the University of New Brunswick, and data from the Canadian Hydrographic Services (CHS). They combine to provide a spatially comprehenisve high-resolution map of southwest New Brunswick. Summaries of the available data for each finfish site in southwest New Brunswick are included.

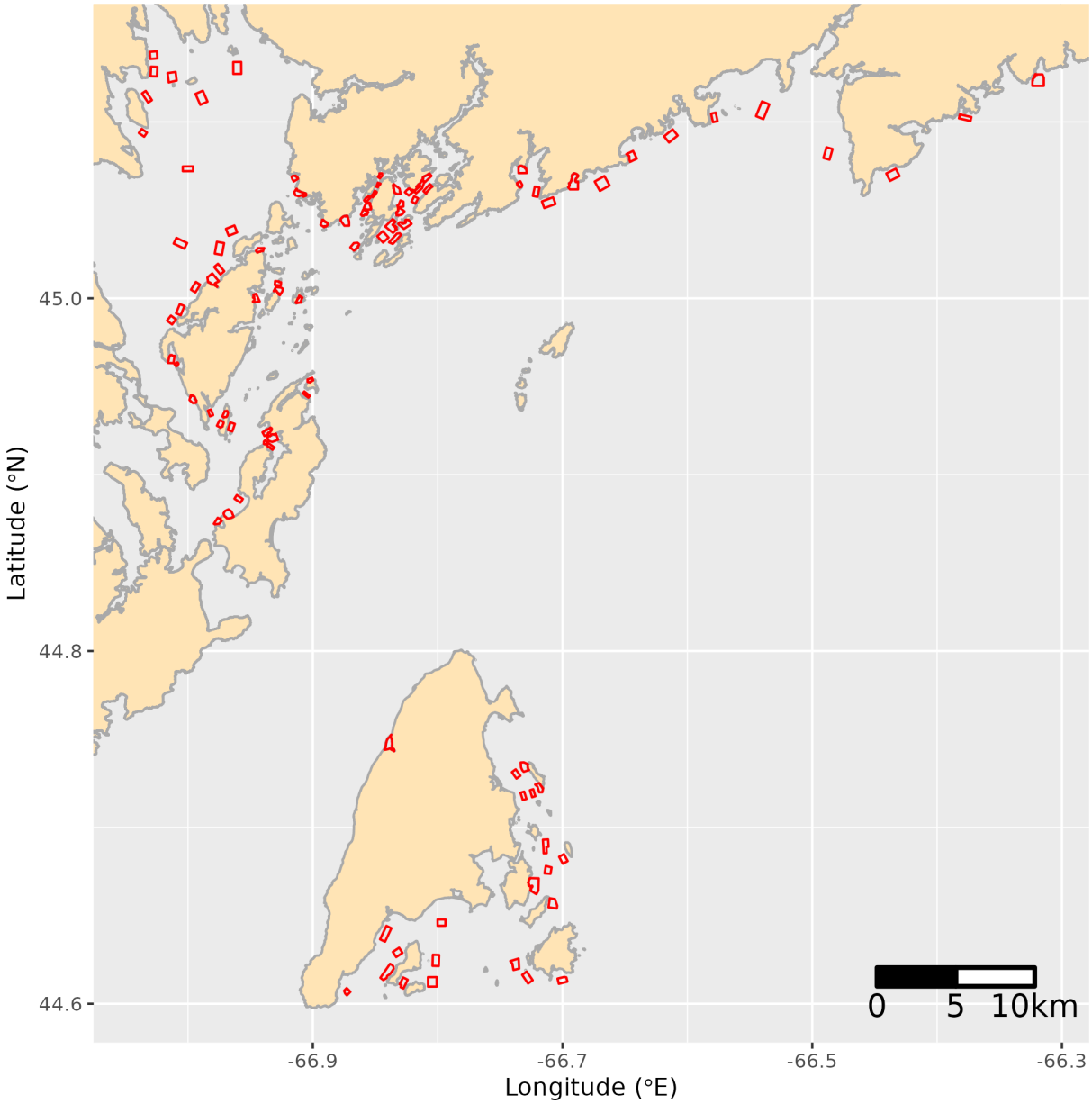


Figure 1.1. Boundaries (red polygons) of farm lease sites in New Brunswick.

2 Data Sources

2.1 Farm Lease Locations

Coordinates for New Brunswick farm lease boundaries were obtained from a shapefile of finfish sites downloaded from the Government of New Brunswick website (New Brunswick Department of Agriculture, Aquaculture and Fisheries 2021) and are shown in Figure 1.1. At the time, lease sites for 95 farms were provided for the southwest New Brunswick area. The sites are

primarily located in regions of Passamaquoddy Bay, Fundy Isles and Letang Inlet, east coast of Grand Manan, and along the mainland coast of NB between the Letang area and Musquash (Figure 1.1). A summary of the farms considered in this report is given in Table 2.1. Of the currently licensed aquaculture lease sites listed in Table 2.1 typically only half are actively utilized for aquaculture operations at any given time.

Table 2.1. Locations of the centre of the lease boundaries and lease areas for the farms considered in this report.

Farm	Longitude (° E)	Latitude (° N)	Lease Area (m^2)
MF-0002	-66.72394	44.71939	101,167.54
MF-0003	-66.83209	44.62913	187,232.26
MF-0004	-66.83877	44.74789	285,425.67
MF-0010	-66.73202	45.07306	200,490.58
MF-0012	-66.73440	45.06465	77,208.03
MF-0014	-66.80862	45.06830	145,209.35
MF-0016	-66.81494	45.06322	193,215.92
MF-0017	-66.80785	45.06208	121,214.96
MF-0018	-66.82292	45.06032	127,739.86
MF-0020	-66.83279	45.06190	174,231.23
MF-0022	-66.82990	45.05349	108,101.95
MF-0023	-66.82994	45.04902	145,982.71
MF-0024	-66.81833	45.05577	106,278.14
MF-0026	-66.82630	45.04194	235,714.58
MF-0027	-66.83752	45.04100	310,377.75
MF-0029	-66.83417	45.03386	198,747.57
MF-0032	-66.84391	45.03481	253,296.40
MF-0033	-66.85104	45.05916	56,755.57
MF-0034	-66.85644	45.05622	64,998.72
MF-0035	-66.85626	45.05230	142,802.34
MF-0036	-66.85856	45.04851	107,239.16
MF-0037	-66.87439	45.04396	253,668.32
MF-0038	-66.89100	45.04244	123,680.85
MF-0039	-66.91002	45.05988	185,077.07
MF-0040	-66.91439	45.06787	91,605.50
MF-0042	-66.94221	45.02722	94,202.81
MF-0044	-66.91102	44.99938	101,449.81
MF-0045	-66.92771	45.00404	158,839.42
MF-0046	-66.94527	45.00010	128,588.86
MF-0049	-66.97025	44.93431	97,713.24
MF-0050	-66.97417	44.92882	121,707.17
MF-0051	-66.98196	44.93504	78,529.21
MF-0052	-66.93660	44.92426	148,259.61
MF-0053	-66.93218	44.92093	231,071.11
MF-0054	-66.93502	44.91681	132,208.01
MF-0055	-66.95943	44.88627	127,326.11
MF-0056	-66.97612	44.87369	114,632.60
MF-0057	-66.99607	44.94270	141,556.72
MF-0058	-67.00919	44.96253	33,579.20
MF-0059	-67.01335	44.96554	161,574.99
MF-0060	-67.01321	44.98768	160,095.70
MF-0061	-67.02724	45.12855	240,457.05
MF-0084	-67.01272	45.12535	291,018.11
MF-0095	-66.84615	45.06941	50,255.78
MF-0159	-66.84744	45.06423	35,480.39
MF-0168	-66.96747	44.87773	243,601.67
MF-0172	-66.72340	44.66671	490,778.96
MF-0179	-66.99390	45.00630	186,849.27
MF-0186	-66.90196	44.95363	64,306.22
MF-0206	-66.90517	44.94542	67,538.29
MF-0213	-66.73018	44.73421	219,988.03
MF-0214	-67.03288	45.11423	199,952.87
MF-0215	-66.92793	45.00850	86,994.44
MF-0222	-66.97989	45.01024	306,712.62
MF-0228	-66.97499	45.01653	193,692.91
MF-0251	-66.97483	45.02831	349,531.16

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Farm	Longitude (° E)	Latitude (° N)	Lease Area (m^2)
MF-0256	-66.96508	45.03836	269,731.65
MF-0270	-66.84062	44.61804	360,248.27
MF-0276	-66.86645	45.02925	161,963.86
MF-0282	-66.71348	44.68926	231,213.24
MF-0290	-67.03610	45.09382	129,743.02
MF-0292	-66.84165	44.63969	328,880.35
MF-0298	-66.69933	44.68211	174,662.68
MF-0300	-66.71160	44.67593	168,032.35
MF-0303	-66.79697	44.64601	198,231.56
MF-0316	-66.73830	44.62239	260,095.15
MF-0320	-67.00619	44.99355	200,000.34
MF-0342	-67.02758	45.13785	202,536.33
MF-0349	-66.73131	44.71789	118,441.13
MF-0350	-66.71876	44.72252	149,334.27
MF-0368	-66.73719	44.73031	152,525.67
MF-0370	-67.00003	45.07340	194,962.09
MF-0377	-67.00608	45.03119	299,943.83
MF-0378	-66.69141	45.06628	411,245.20
MF-0381	-66.72814	44.61487	239,199.82
MF-0400	-66.64469	45.08043	227,534.46
MF-0403	-66.80153	44.62459	279,588.32
MF-0404	-66.48741	45.08208	280,078.85
MF-0408	-66.80429	44.61241	329,877.16
MF-0411	-66.96525	44.92707	150,143.64
MF-0412	-66.57842	45.10255	164,975.62
MF-0413	-66.87243	44.60684	98,546.30
MF-0416	-66.70007	44.61326	187,568.66
MF-0491	-66.82725	44.61177	187,790.19
MF-0494	-66.31910	45.12376	470,304.10
MF-0495	-66.37752	45.10238	190,186.37
MF-0496	-66.66828	45.06508	472,148.01
MF-0501	-66.43542	45.07001	349,965.57
MF-0502	-66.98915	45.11368	374,956.23
MF-0503	-66.70779	44.65689	264,875.73
MF-0504	-66.96052	45.13059	374,953.64
MF-0507	-66.61322	45.09205	349,961.77
MF-0508	-66.71111	45.05421	337,456.68
MF-0509	-66.72114	45.06042	179,984.60
MF-0510	-66.53973	45.10659	499,953.61

2.2 Bathymetric Datasets

Several bathymetric datasets with varying coverage, resolution, and accuracy are available. Owing to issues related to spatial resolution, inconsistencies within the datasets, or misalignment between datasets, some of these datasets were excluded from consideration. Only three datasets are considered in this report: New Brunswick (NB) lidar data, multibeam data from the Ocean Mapping Group (OMG) at the University of New Brunswick, and data from the Canadian Hydrographic Services (CHS).

The data is presented in a positive down format, where 0 m is Mean Water Level (MWL), -10 m is used as a high water cutoff, and values greater than zero are the depth below MWL. The high water cutoff is set at -10 m, ensuring that areas above remain dry with the local hydrodynamic conditions. The NB lidar data provides bathymetry in intertidal areas. The OMG data provides high resolution data in several coastal subtidal areas of NB. The CHS data provides data throughout the Bay of Fundy. All bathymetric data reported in this document are referenced using MWL as the vertical datum. The OMG and CHS depth data were provided relative to MWL.

The NB lidar data was provided in Canadian Geodetic Vertical Datum of 2013 (CGVD2013) and were shifted to MWL using the CANEAST2015_v1 Continuous Vertical Datum (CVD) developed by CHS (Robin et al. 2014). The CVD allows for a spatially varying datum transform instead of a single offset value being used to shift the data. Shifting the data to a common datum allows the water depths of the different datasets to be compared and used in combination. Additional details of each dataset are provided in the subsections below.

As this report focuses on aquaculture sites the Figures and data have been limited to the data within the box defined by -67.10063, -66.25033, 44.55951, 45.18354. Table 2.2 is the number of points used from each dataset, and the minimum and maximum depths within the defined box.

Table 2.2. The number of points used, minimum depth, and maximum depth for each bathymetric dataset. The depths are relative to mean water level (MWL).

Dataset	# Points Used	Minimum Depth (m)	Maximum Depth (m)
CHS	7,690,475	-4.11	226.660
NB Lidar	1,133,069	-10.00	4.035
OMG Multibeam	24,079,939	-0.18	148.650
All Data	32,903,483	-10.00	226.660

Figure 2.1 shows the frequency of water depths within the defined area. The water depth of all the datasets ranges from -10 to 226 meters above and below MWL. The water is relatively shallow, 50% of the data has a depth less than 36 meters and 90% of the data has a depth less than 100 meters. When using the three datasets the spacing between the data points is 7.9 centimeters to 768.2 meters. The typical distances have much closer ranges with 90% of the data points having a neighbour between 2.39 meters and 12.11 meters away.

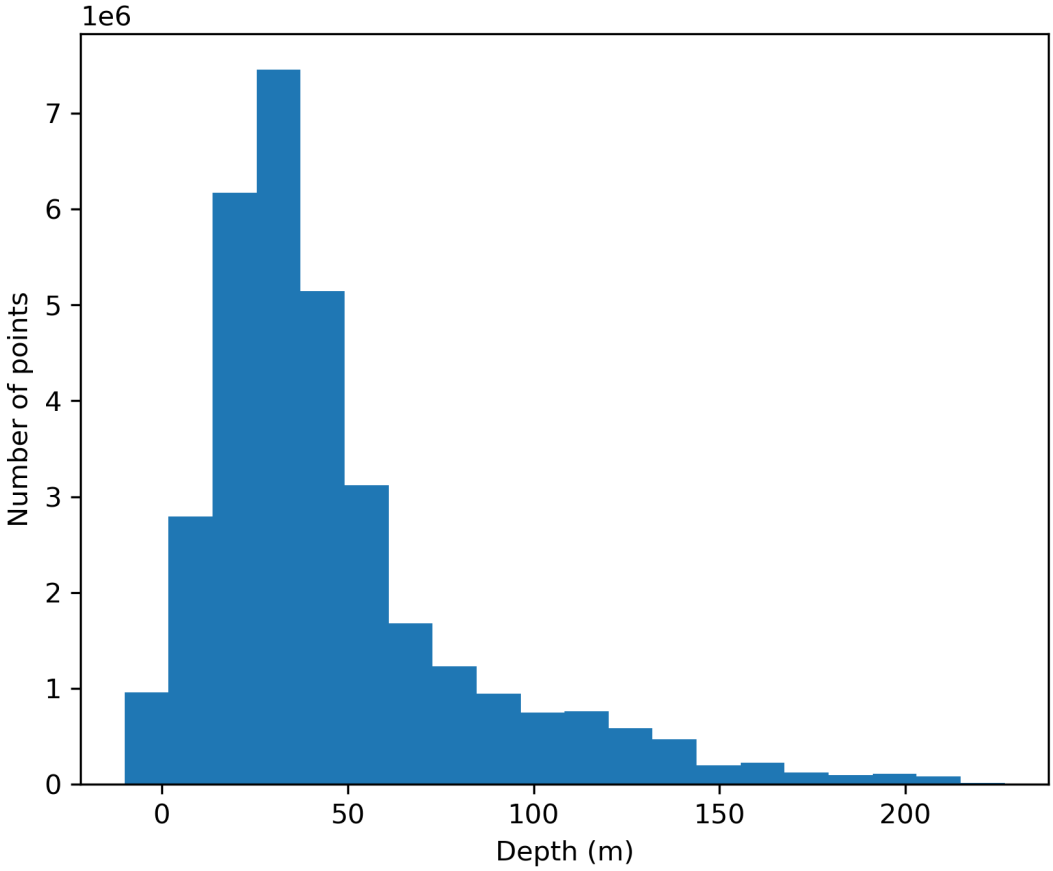


Figure 2.1. Histogram of the water depth for all three datasets. Depth levels are vertically referenced to MWL.

For each farm, bathymetric data is extracted within a 5 km radius of the farm lease boundaries. The bathymetry for most sites included data from all three data sets, only five sites had data from 2 data sets and no sites had data from only one data set. Table 2.3 gives the number of bathymetric datasets used and the depth ranges within the farm lease boundaries, the 500 m buffer of the lease boundaries, and the 5 km buffer of the lease boundaries for each farm. The 500-meter buffer was selected, as it is occasionally recognized as the upper distance where spatial variation is minimal, thereby maintaining representativeness. A 5-kilometer buffer was selected as the lower upper limit for the potential dispersal distance of particulate waste from aquaculture activities. The buffers were created using the lease boundaries. Specifically, R's rgeos gBuffer function was applied to the lease boundary polygons to generate the 500-meter and 5-kilometer buffers. As shown in the figures, these buffers are non-circular. The non-circularity is more evident in the 500-meter buffer than the 5 km buffer, as increasing the buffer distance reduces the visual distinction between buffers based on polygons instead of a point.

Table 2.3. The number of bathymetric datasets considered at each given farm site and the minimum, h_{min}, and maximum, h_{max} depths in the vicinity of the farms considered in this report. Minimum and maximum bathymetric depths are reported within the farm lease, within a 500 m buffer of the lease boundaries, and within a 5 km buffer of the lease boundaries. All depths are relative to MWL. NaN indicates that no data are available in the region.

Farm	# Datasets	h_{min} (lease)	h_{max} (lease)	h_{min} (500 m)	h_{max} (500 m)	h_{min} (5 km)	h_{max} (5 km)
MF-0002	3	10.76	14.66	-9.96	20.56	-10.00	101.53
MF-0003	3	8.64	19.25	-10.00	23.70	-10.00	44.60
MF-0004	2	-3.46	0.90	-9.97	71.04	-9.98	113.45
MF-0010	3	-6.89	3.20	-10.00	15.83	-10.00	54.73
MF-0012	3	-3.18	16.39	-10.00	26.12	-10.00	57.12
MF-0014	3	-3.40	23.49	-10.00	24.44	-10.00	102.66
MF-0016	3	-8.58	24.88	-10.00	79.48	-10.00	102.66
MF-0017	3	-6.07	21.88	-10.00	28.76	-10.00	102.66
MF-0018	3	-2.18	79.48	-9.98	79.48	-10.00	102.66
MF-0020	3	-2.11	17.05	-9.99	23.59	-10.00	102.66
MF-0022	3	-3.70	20.38	-10.00	31.14	-10.00	102.66
MF-0023	3	-8.68	23.63	-10.00	31.14	-10.00	124.20
MF-0024	3	16.59	23.89	-9.98	79.48	-10.00	102.66
MF-0026	3	-4.65	102.66	-9.99	102.66	-10.00	135.13
MF-0027	3	-2.11	22.83	-10.00	28.06	-10.00	135.13
MF-0029	3	6.18	27.10	-9.99	39.48	-10.00	135.13
MF-0032	3	8.36	29.83	-10.00	39.48	-10.00	135.13
MF-0033	3	-2.36	23.76	-10.00	24.55	-10.00	105.46
MF-0034	3	-3.98	24.55	-10.00	25.15	-10.00	105.46
MF-0035	3	-2.95	16.59	-10.00	25.15	-10.00	132.32
MF-0036	3	4.32	15.93	-10.00	25.61	-10.00	135.13
MF-0037	3	-2.60	30.68	-10.00	53.18	-10.00	145.61
MF-0038	3	-3.42	23.71	-10.00	65.01	-10.00	145.61
MF-0039	3	-5.03	32.88	-10.00	81.64	-10.00	145.61
MF-0040	3	-3.12	31.62	-10.00	68.89	-10.00	145.61
MF-0042	3	-4.22	14.28	-9.99	16.66	-10.00	105.46
MF-0044	3	-3.17	25.30	-9.99	74.91	-10.00	148.65
MF-0045	3	-6.83	31.55	-10.00	53.41	-10.00	148.65
MF-0046	3	-3.24	23.33	-10.00	23.96	-10.00	148.65
MF-0049	3	-6.79	24.18	-10.00	65.15	-10.00	123.08
MF-0050	3	-3.00	34.61	-10.00	52.35	-10.00	122.42
MF-0051	3	12.23	36.76	-10.00	59.70	-10.00	121.34
MF-0052	3	-5.10	24.52	-10.00	50.80	-10.00	148.65
MF-0053	3	-5.88	25.67	-10.00	31.56	-10.00	147.01
MF-0054	3	1.61	27.96	-9.99	36.01	-10.00	123.08
MF-0055	3	7.48	27.57	-9.99	28.99	-10.00	121.00
MF-0056	3	-3.11	14.63	-10.00	28.07	-10.00	105.72
MF-0057	3	-9.63	26.46	-10.00	66.24	-10.00	121.34
MF-0058	3	-1.84	18.27	-10.00	85.47	-10.00	121.34
MF-0059	3	-4.91	26.60	-10.00	89.25	-10.00	121.34
MF-0060	3	-2.03	56.28	-10.00	57.50	-10.00	121.34
MF-0061	3	19.97	34.74	-9.96	49.57	-10.00	79.05
MF-0084	3	13.99	31.68	-8.28	57.67	-10.00	79.05
MF-0095	3	-3.35	19.55	-10.00	21.76	-10.00	102.66
MF-0159	3	-2.66	21.76	-10.00	23.36	-10.00	102.66
MF-0168	3	-5.31	25.75	-10.00	28.83	-10.00	121.00
MF-0172	3	-8.88	13.60	-10.00	15.91	-10.00	106.05
MF-0179	3	38.58	44.48	-10.00	46.98	-10.00	82.67
MF-0186	3	-6.18	23.23	-10.00	58.48	-10.00	148.65
MF-0206	3	7.10	13.83	-10.00	29.91	-10.00	148.65
MF-0213	3	-5.44	19.29	-10.00	26.48	-10.00	95.96
MF-0214	3	17.82	22.62	-10.00	40.74	-10.00	79.05
MF-0215	3	1.60	34.44	-10.00	47.55	-10.00	148.65
MF-0222	3	-2.92	38.91	-10.00	47.56	-10.00	77.35
MF-0228	3	24.17	47.56	-9.99	49.53	-10.00	71.32
MF-0251	3	32.35	51.96	17.27	52.14	-10.00	79.65
MF-0256	3	30.41	40.64	-9.27	45.03	-10.00	88.12
MF-0270	3	4.89	18.01	-10.00	21.33	-10.00	47.16
MF-0276	3	-0.71	51.18	-10.00	67.59	-10.00	135.13
MF-0282	3	9.13	12.19	-6.84	12.90	-10.00	114.29
MF-0290	3	17.52	20.42	-9.92	27.87	-10.00	79.05

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Farm	# Datasets	h_{min} (lease)	h_{max} (lease)	h_{min} (500 m)	h_{max} (500 m)	h_{min} (5 km)	h_{max} (5 km)
MF-0292	3	8.72	22.45	-9.99	24.76	-10.00	72.56
MF-0298	3	9.93	14.04	-9.99	19.66	-10.00	125.47
MF-0300	3	1.62	16.46	-1.54	19.94	-10.00	115.77
MF-0303	3	10.68	12.40	7.42	13.37	-10.00	42.46
MF-0316	3	0.18	19.23	-6.18	21.99	-10.00	46.97
MF-0320	3	5.37	47.04	-10.00	57.31	-10.00	121.34
MF-0342	3	17.08	21.09	-9.96	27.41	-10.00	79.05
MF-0349	3	8.76	11.07	-9.86	13.57	-10.00	97.90
MF-0350	3	-6.57	19.37	-9.99	22.86	-10.00	104.03
MF-0368	3	0.89	16.52	-1.39	22.82	-10.00	95.58
MF-0370	3	33.17	54.94	27.09	58.87	-10.00	88.12
MF-0377	3	23.70	35.70	21.60	44.23	-10.00	77.35
MF-0378	3	-7.39	38.86	-10.00	44.33	-10.00	68.37
MF-0381	3	2.63	24.00	-9.71	27.67	-10.00	52.37
MF-0400	3	0.71	36.09	-10.00	56.81	-10.00	62.03
MF-0403	3	9.08	15.30	-2.52	15.60	-10.00	41.49
MF-0404	3	NaN	NaN	-1.91	31.42	-10.00	58.58
MF-0408	3	7.56	18.46	-9.98	19.19	-10.00	45.58
MF-0411	3	4.41	28.52	-10.00	56.84	-10.00	123.08
MF-0412	2	8.60	23.59	-10.00	36.91	-10.00	44.97
MF-0413	3	16.40	20.14	-9.99	22.73	-10.00	88.01
MF-0416	3	11.31	16.82	-10.00	19.43	-10.00	105.07
MF-0491	3	1.66	19.90	-10.00	21.13	-10.00	45.58
MF-0494	2	-0.25	28.40	-10.00	33.09	-10.00	56.18
MF-0495	2	5.15	25.35	-9.99	34.74	-10.00	61.75
MF-0496	3	24.74	45.86	-9.94	49.65	-10.00	68.37
MF-0501	3	12.98	29.87	-10.00	40.77	-10.00	81.22
MF-0502	3	26.54	37.05	11.78	44.67	-10.00	81.50
MF-0503	3	9.83	21.60	-9.99	22.41	-10.00	118.28
MF-0504	3	16.80	21.07	-4.47	26.38	-10.00	79.05
MF-0507	3	28.88	37.99	-9.98	38.32	-10.00	57.01
MF-0508	3	32.64	49.34	-9.90	53.58	-10.00	71.46
MF-0509	3	14.97	28.44	-9.97	41.40	-10.00	68.37
MF-0510	2	10.31	27.28	5.82	28.50	-10.00	39.06

The water depths across the three datasets do not always align, as illustrated in the collated data presented in the appendix figures, where these differences can be clearly observed. These anomalies constitute a small percentage of the total number of points and are only discernible when examining the raw data directly. Utilization of the data in practical applications typically employs filtering or averaging techniques, which minimizes their influence. For the scope of this report, these data points have not been excluded. This inconsistency primarily arises when there are limited data points in a small area or when a series of points from one dataset intersect with another dataset. The anomalies may be of consequence to some applications focusing on the areas containing the anomalies.

2.2.1 New Brunswick Lidar Data

The province of New Brunswick, Canada has conducted a comprehensive lidar survey of the land within the province. Although the focus was to obtain land elevation data, an effort was made to conduct the coastal surveys at low tide. As a result the dataset provides good coverage of the intertidal zones. Due to the large tides in the Bay of Fundy, there are significant intertidal regions in proximity of finfish aquaculture farms in New Brunswick and hence bathymetric data in these regions are important. The New Brunswick lidar data were downloaded from Service

New Brunwick's GeoNB website (Service New Brunswick 2019) at 1 m resolution and decimated to a 10 m resolution in the horizontal. The horizontal datum is North American Datum of 1983 (NAD83) and the vertical datum is CGVD2013. The data were converted from CGVD2013 to MWL using the CHS-CVD. The CHS-CVD provides accurate spatially varying values that were used to shift vertical datum of the data. After the vertical datum was shifted the values were capped at 10 m above MWL, removing the majority of land but still preserving the intertidal areas for use in modelling activities. Spatial coverage of the lidar data in the vicinity of New Brunswick finfish farms is shown in Figure 2.2. As in the Figure, these data provide excellent coverage along the coastline (including islands), and cover much of the intertidal areas.

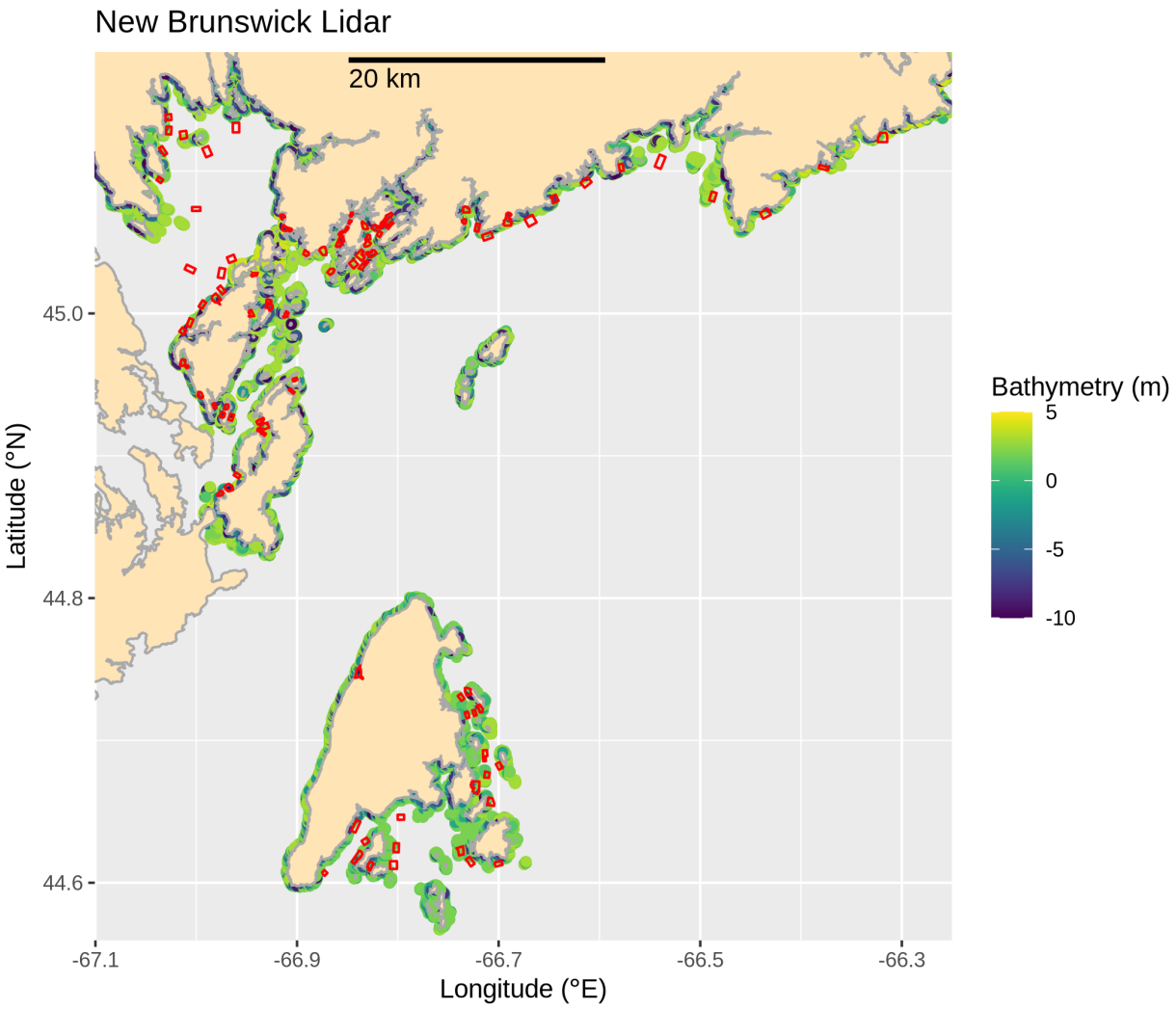


Figure 2.2. Intertidal areas of NB lidar data (green and blue) in southwest NB. Bathymetric depth levels are vertically referenced to MWL. Bathymetric depth levels are vertically referenced to MWL. Red polygons are finfish farm lease sites.

Figure 2.3 shows the frequency of the water depths derived from lidar within the defined area. The water depth of the lidar data ranges from -10 to 4 meters. As the lidar data covers the inter-tidal areas the depths are very shallow, 50% of the data has a depth less than -2.71 meters and 90% of the data has a depth less than 2.41 meters. The data was decimated to 10 meters spacing resulting in data points having consistent spacing. The distance between data points is 10 meters to 39.62 meters, with 90% of the data having a horizontal spacing of 10.01 meters to 10.70 meters. After decimation if a point becomes isolated, the distance between a point and its closest neighbour can increase by unexpected amounts. Decimation only dictates a minimum

spacing between data points.

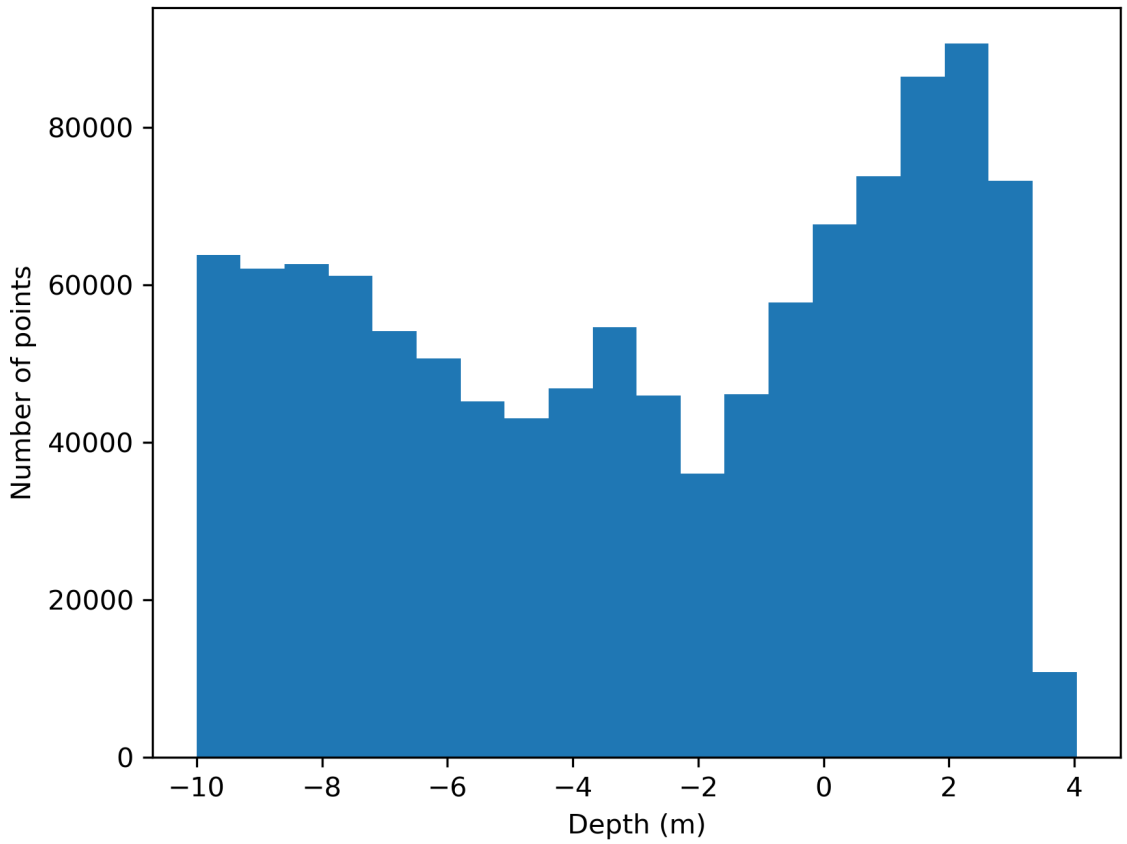


Figure 2.3. Histogram of the water depth for New Brunswick Lidar Data. Depth levels are vertically referenced to MWL.

2.2.2 Ocean Mapping Group Multibeam Data

The Ocean Mapping Group at the University of New Brunswick has collected and made available high resolution multibeam data for many areas in the coastal waters of southwest New Brunswick (Ocean Mapping Group 2007). Data were extracted on 1 December 2011 for the bounding box 44° 20’ N to 45° 15’ N and 67° 21’ W to 66° 30’ W on a 1 m horizontal grid and decimated to 5 m resolution in the horizontal. Spatial coverage of the extracted data in the vicinity of New Brunswick finfish farms is shown in Figure 2.4. The horizontal datum is NAD83 and the vertical datum is MWL.

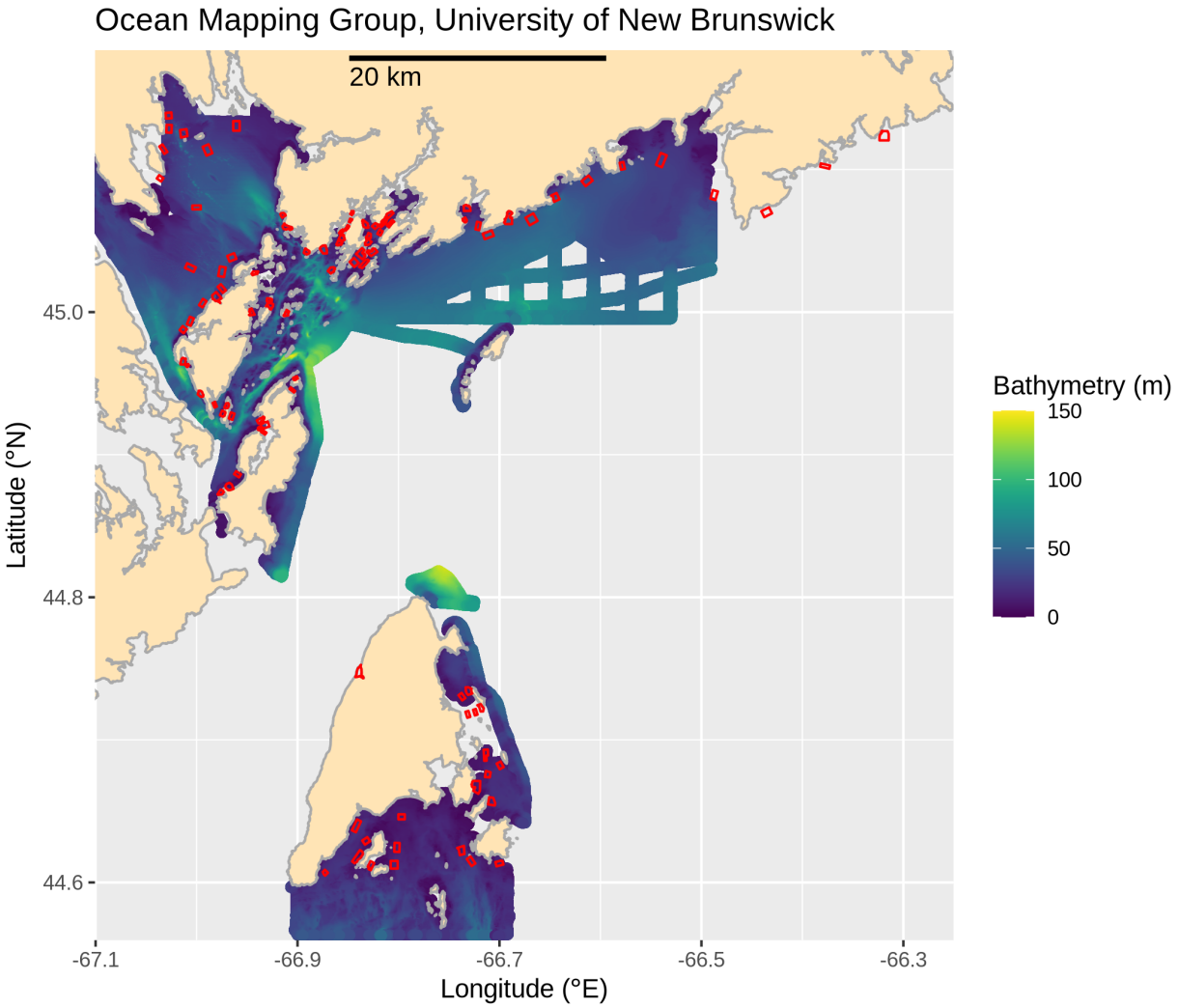


Figure 2.4. OMG Multibeam data collected in southwest NB. Bathymetric depth levels are vertically referenced to MWL. Red polygons are finfish farm lease sites.

Figure 2.5 shows the frequency of water depths within the defined area. The water depth of the OMG data ranges from -0.18 meters to 148.65 meters and therefore overlaps the NB Lidar data in the 0 to 4m depth range. The OMG data covers a wide range of areas with the depths ranging from the shallow inter-tidal to the very deep; 50% of the data has a depth less than 30.48 meters and 90% of the data has a depth less than 57.8 meters. The distance between data points is 4.89 meters to 5.11 meters, with 90% of the data having spacing of 5.0 meters. The spacing of the OMG data is very consistent.

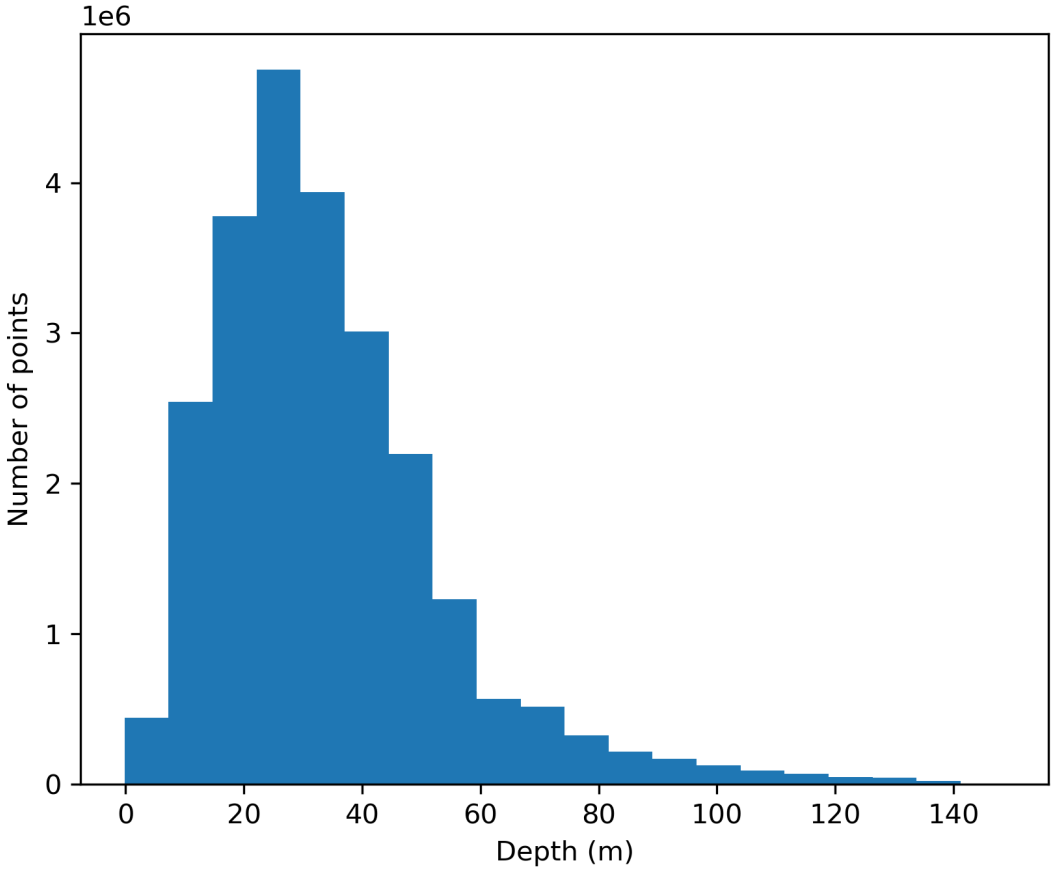


Figure 2.5. Histogram of the water depth for Ocean Mapping Group Multibeam Data. Depth levels are vertically referenced to MWL.

2.2.3 Canadian Hydrographic Services Data

As part of a comparison study between FVCOM and NEMO hydrodynamic models of Saint John Harbour, New Brunswick (Nudds et al. 2020), a bathymetric dataset was created containing the best data available to the Canadian Hydrographic Services. Although the dataset includes data from much of the SWNB area there are some notable gaps. In the context of finfish farming, the gaps of particular note include include the western portion of Campobello Island, eastern portion of the Fundy Isles and the coastal area between Bliss Island and Pt. Lepreau. Unfortunately, the data set does not include identification of the sources of each data point, thus preventing the decomposition of the data set into its component parts and making the identification of potentially duplicate data points difficult. Hence, no effort was made in the present compilation of data to identify and remove duplicates. The dataset potentially contains portions but not all of the OMG multibeam data, as the OMG data set has extensive coverage in the areas without data in the CHS data set. Since the dataset is a compilation of several data sources, the horizontal resolution is variable. The horizontal datum is World Geodetic System of 1984 (WGS84) and the vertical datum is MWL. Spatial coverage of the extracted data in the vicinity of New Brunswick

finfish farms is shown in Figure 2.6.

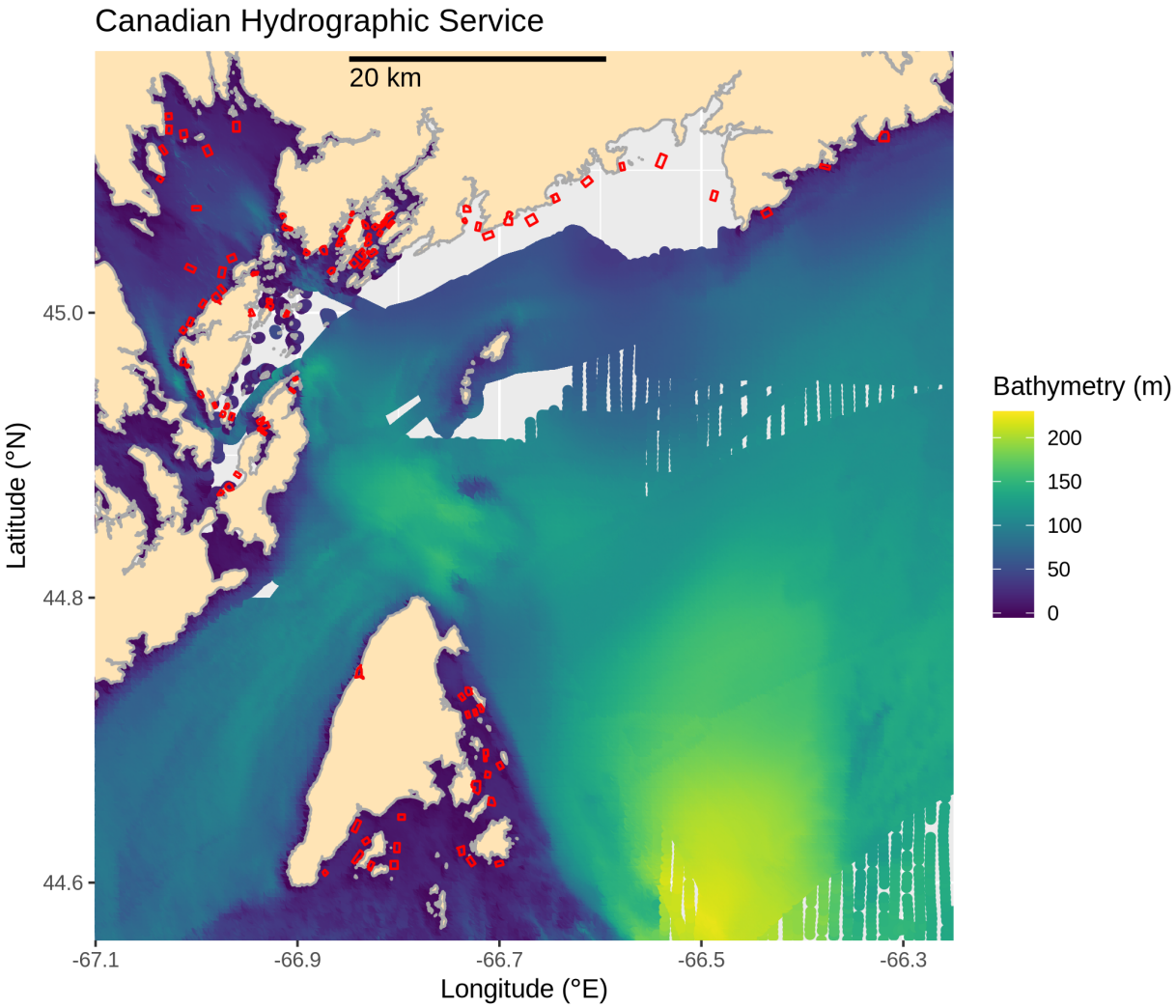


Figure 2.6. CHS bathymetric data in southwest NB. Bathymetric depth levels are vertically referenced to MWL.

Figure 2.7 shows the frequency of water depths within the defined area. The water depth of the Canadian Hydrographic Services data spans the intertidal to the deepest portions of the Bay of Fundy i.e. -4.1 meters to 226.66 meters; 50% of the data has a depth less than 81.98 meters and 90% of the data has a depth less than 148.49 meters. The CHS data set overlaps the OMG data set in a subset of the near-coastal shallow areas and augments the OMG data set with data having depths greater than about 60m. The distance between data points can vary greatly.

The smallest spacing is 7.9 centimeters and the largest is 768.2 meters. In general the data has closer spacing, 90% of the data having a spacing of 2.26 meters to 20.34 meters.

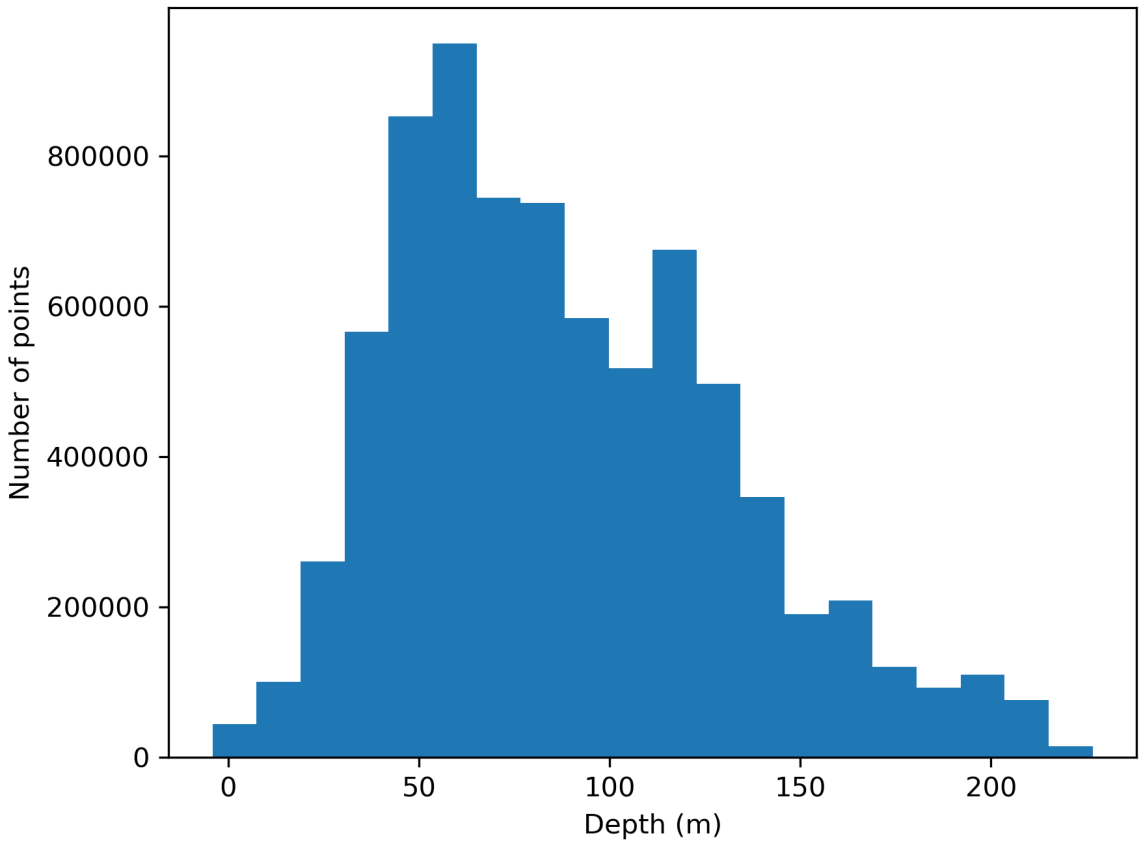


Figure 2.7. Histogram of the water depth for Canadian Hydrographic Services Data. Depth levels are vertically referenced to MWL.

3 Data Reporting Structure

For each farm, available data are reported in a separate section. The following information is provided.

- the location of the lease centre, defined as the mid-point of the longitude and latitude ranges
- the area of the farm lease
- the number of bathymetric datasets containing data within the 5 km buffer zone from the lease boundary.
- the bathymetric ranges (note that since the NB lidar dataset contains land values, the range is cut off at -10 m) within the farm lease, within a 500 m buffer of the farm lease, and within a 5 km buffer of the farm lease.
- a plot of bathymetric data source
- a plot of merged composite bathymetry. The bathymetry is layered in the following order (from bottom to top): CHS, OMG, and NB lidar datasets.

For ease of reading, data for each farm is given in the Appendix.

4 Conclusions

A composite bathymetric dataset was compiled for the southwest New Brunwick area. Data were extracted from three bathymetric datasets: NB lidar data, OMG multibeam data, and CHS data. The NB lidar data provides high resolution coverage of intertidal areas in the province of New Brunswick. The OMG data provides high resolution multibeam data in several coastal areas of southwest NB. The CHS data provides high quality data coverage within much of the Bay of Fundy.

Data was extracted in the vicinity of 95 licenced finfish aquaculture farm sites. Lease areas of finfish sites in southwest NB range between 33579 m^2 to 499954 m^2. Each farm lease has a distinct maximum depth, with these maxima varying between sites from 0.9 m to 102.66 m. Within the farm lease and a 500-meter buffer around each site, the deepest depth varies between locations, from 12.9 m to 102.66 m. Within the farm lease and a 5 km meter buffer around each site, the deepest depth varies between locations, from 39.06 m to 148.65 m.

For each finfish lease site, plots were provided indicating the coverage of the three bathymetric datasets within a 5 km buffer of the lease boundary as well as plots of the bathymetry in the same region.

Key findings include the following:

- Coverage and Resolution: The NB lidar data provide excellent coverage of intertidal zones, while the OMG and CHS datasets offer high-resolution data in coastal and deeper waters, respectively. The merged composite bathymetry layers (CHS, OMG, and NB lidar) provide a robust dataset for modeling purposes.
- Depth Ranges: Bathymetric depths range widely, from -10 meters (high-water cutoff) to 149 meters, reflecting the diverse underwater topography around aquaculture lease areas.
- Farm-Specific Analysis: For each aquaculture site, bathymetric ranges were reported within the farm lease boundaries and within 500-meter and 5-kilometer buffers. These analyses provide critical spatial context for understanding the potential environmental impacts of aquaculture activities.

While the individual and combined datasets examined in this report are suitable for modeling purposes, limitations such as data gaps and inconsistencies remain. Future work could address these limitations by incorporating additional datasets or improving data resolution.

In summary, this report provides a valuable foundation for further research and policy-making related to the environmental assessment of finfish aquaculture in New Brunswick. The dataset compiled and analyzed here will serve as useful inputs for several applications including hydrodynamic, aquaculture effluent deposition and resuspension models, and marine conservation area considerations, and the decision making process these applications contribute to.

5 References

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6 Appendix

6.1 Farm MF-0002

The lease centre for farm MF-0002 is 66.7239° W, 44.7194° N and the lease encompasses an area of 101168 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.1.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.1.2. Within the lease boundaries, the bathymetry ranges from 11 m to 15 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 21 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 102 m.

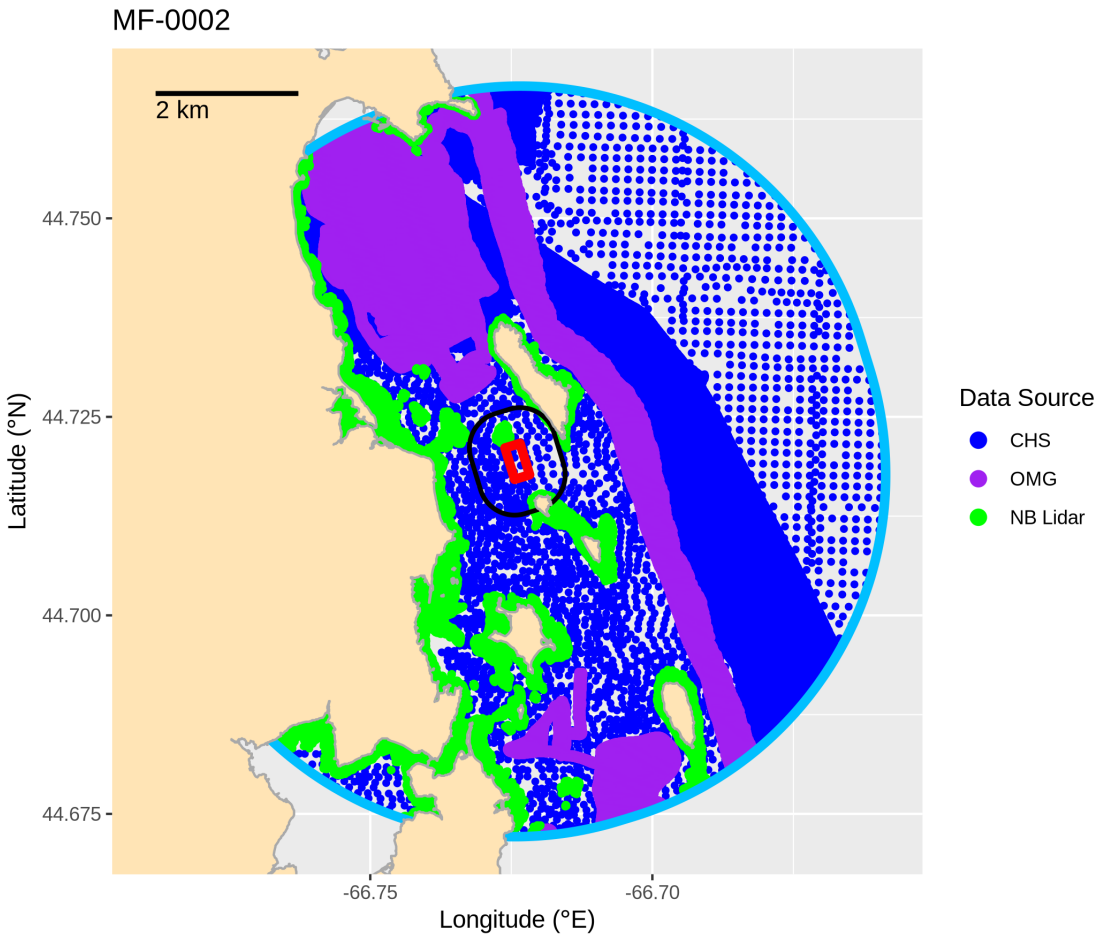


Figure 6.1.1. Farm MF-0002 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

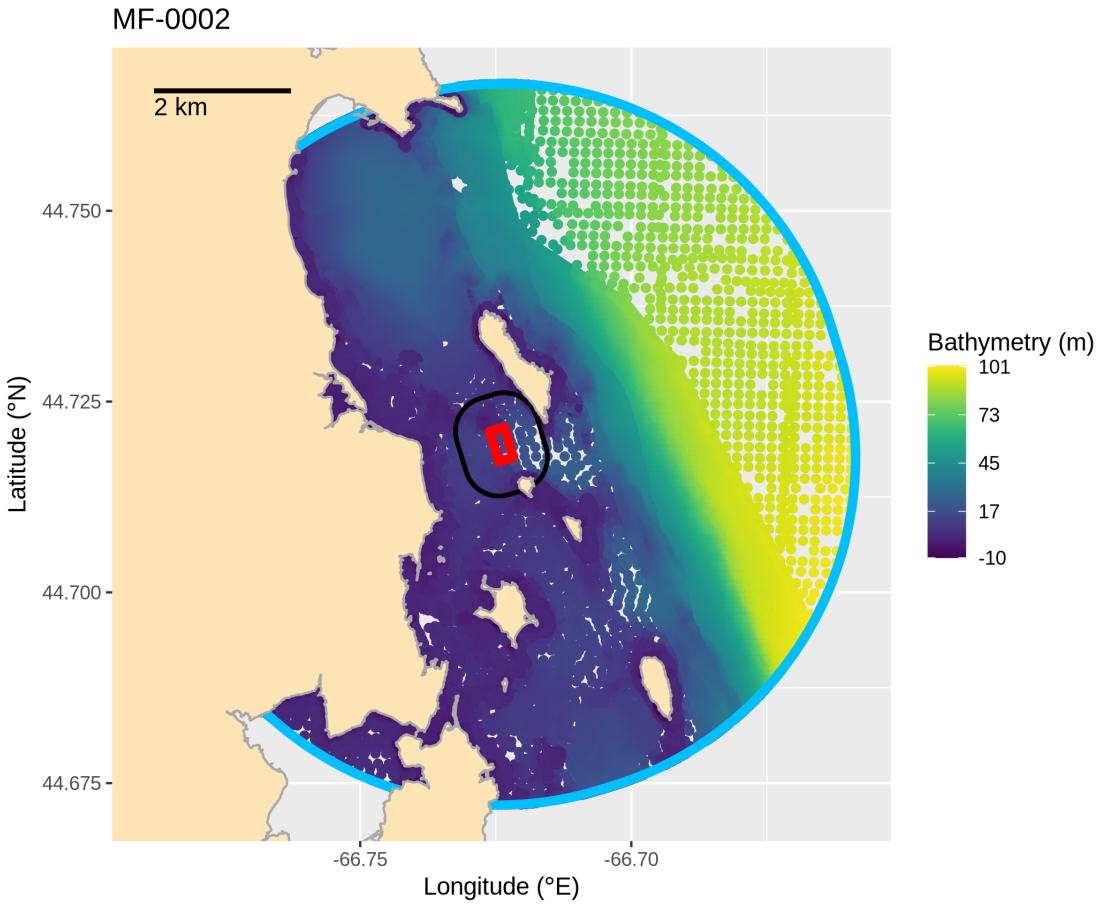


Figure 6.1.2. Farm MF-0002 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.2 Farm MF-0003

The lease centre for farm MF-0003 is 66.8321° W, 44.6291° N and the lease encompasses an area of 187232 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.2.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.2.2. Within the lease boundaries, the bathymetry ranges from 9 m to 19 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 24 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 45 m.

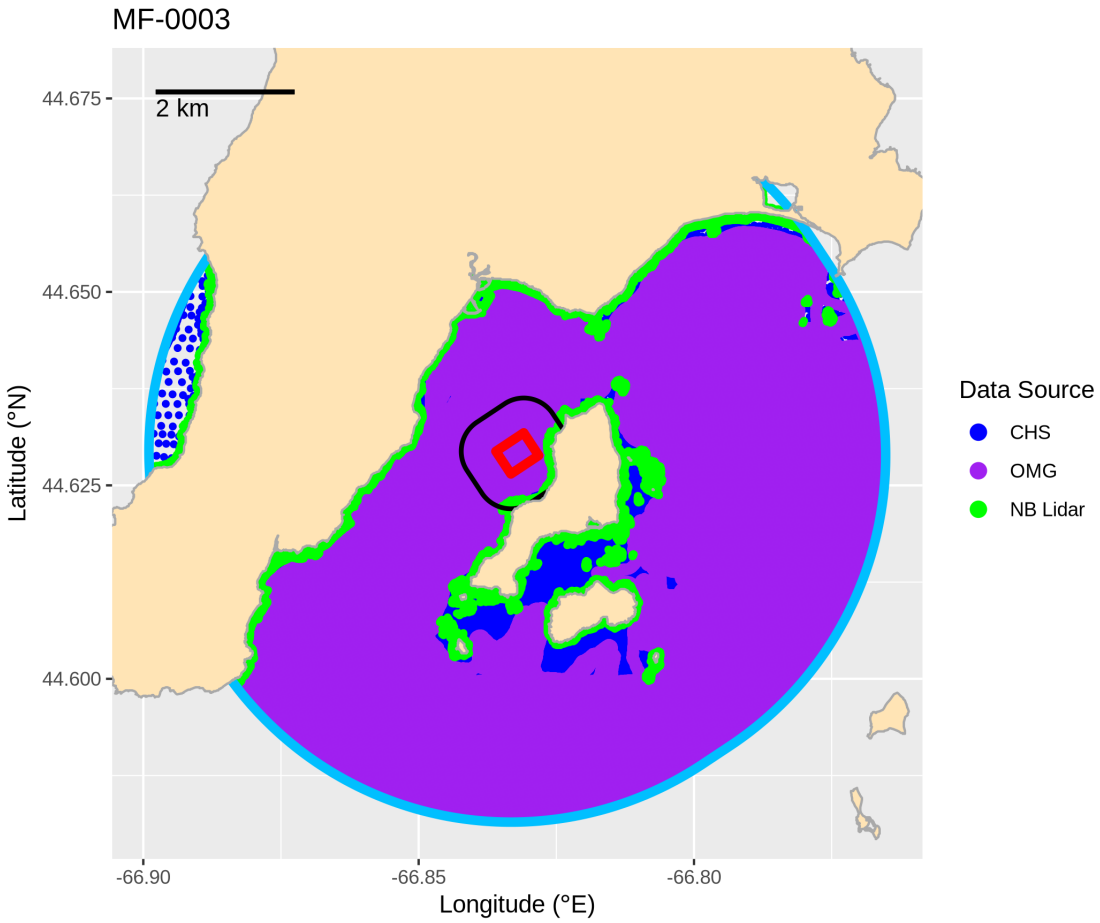


Figure 6.2.1. Farm MF-0003 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

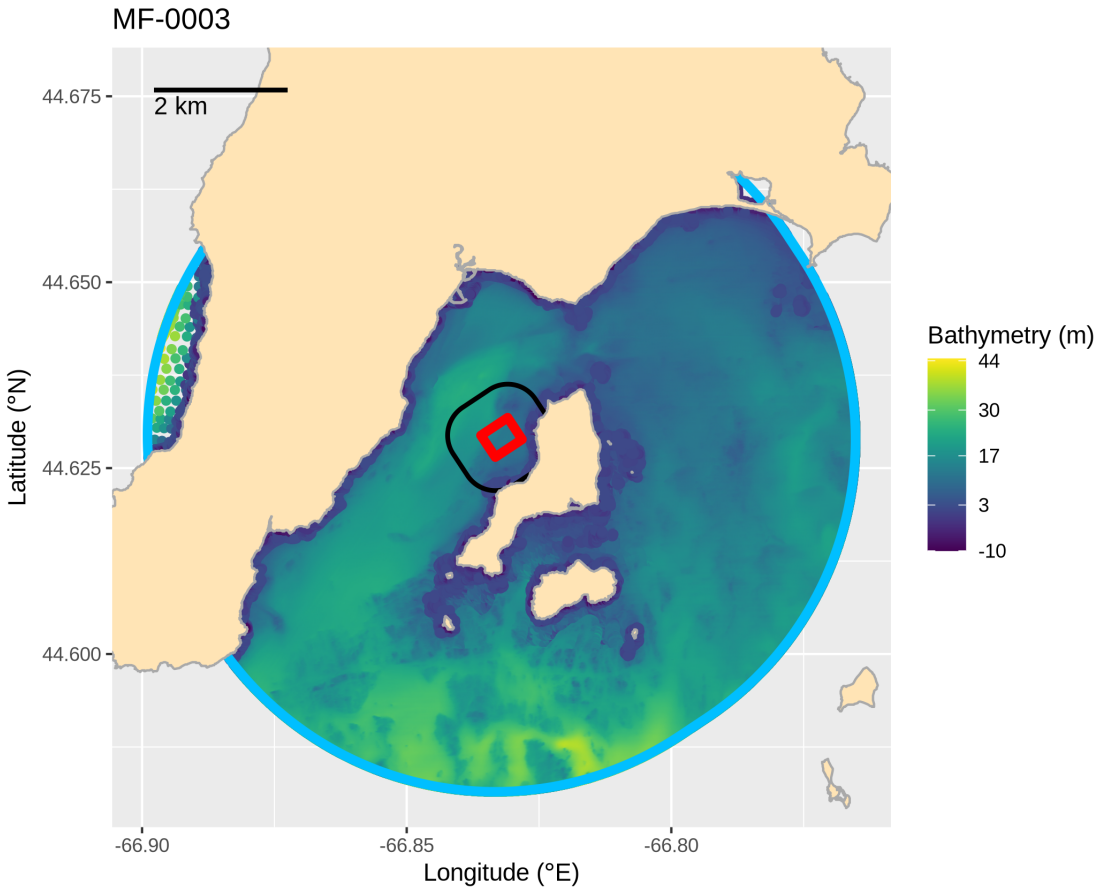


Figure 6.2.2. Farm MF-0003 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.3 Farm MF-0004

The lease centre for farm MF-0004 is 66.8388° W, 44.7479° N and the lease encompasses an area of 285426 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 2 bathymetric datasets. The locations of the data sources are shown in Figure 6.3.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.3.2. Within the lease boundaries, the bathymetry ranges from -3 m to 1 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 71 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 113 m.

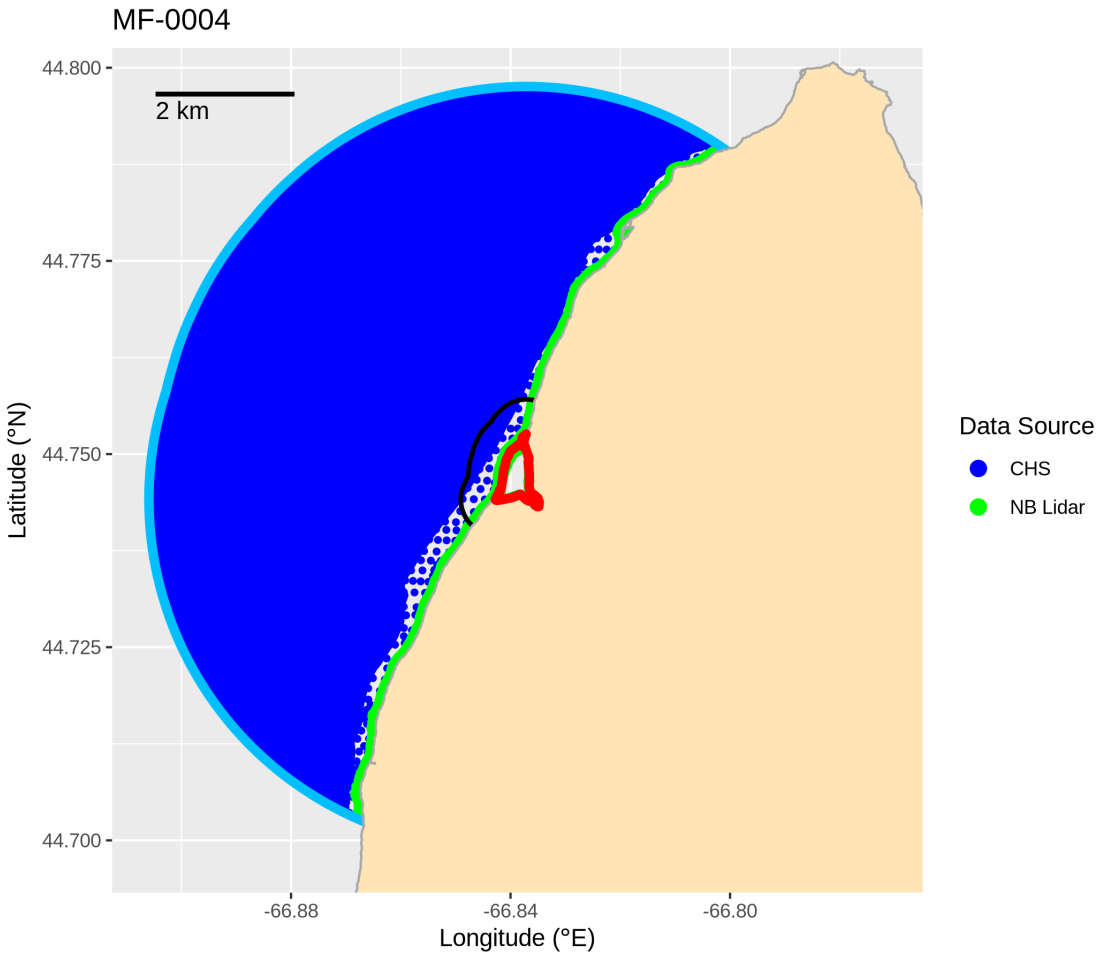


Figure 6.3.1. Farm MF-0004 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

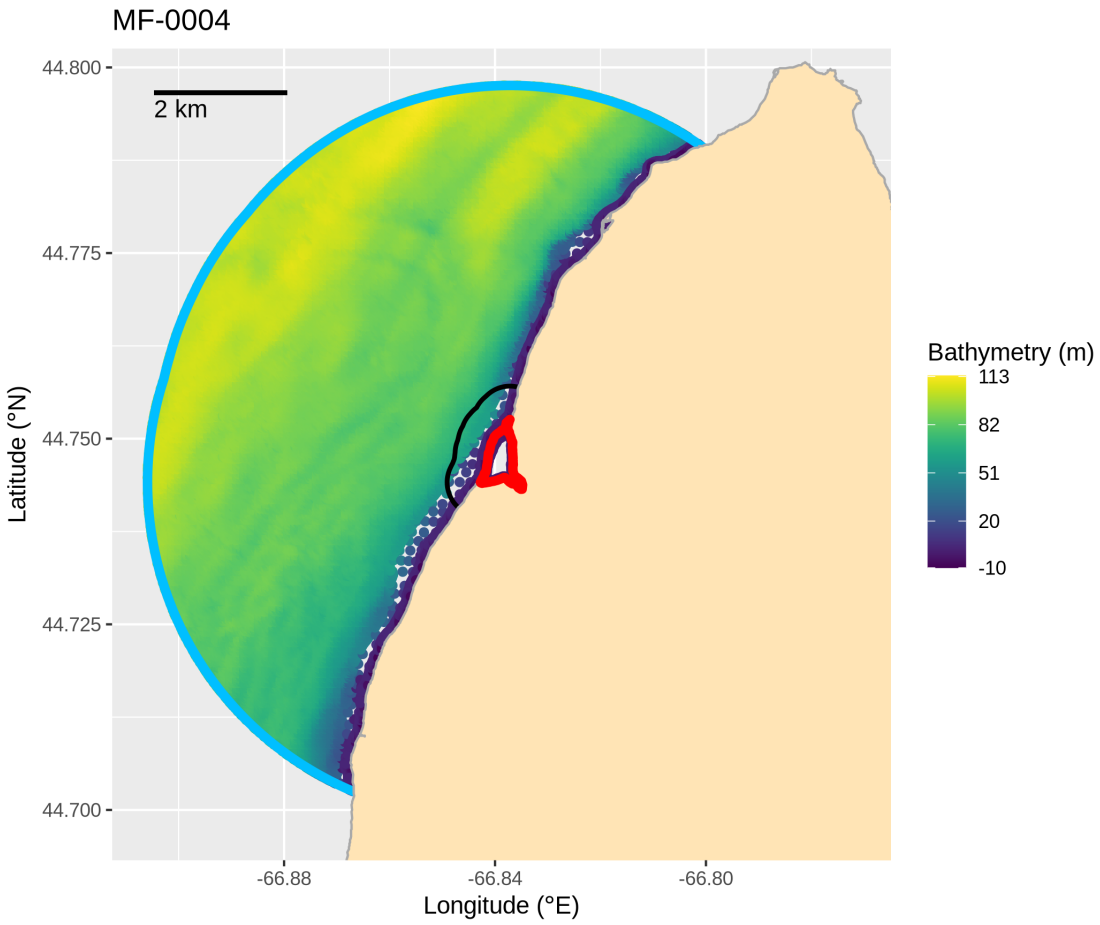


Figure 6.3.2. Farm MF-0004 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.4 Farm MF-0010

The lease centre for farm MF-0010 is 66.7320° W, 45.0731° N and the lease encompasses an area of 200491 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.4.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.4.2. Within the lease boundaries, the bathymetry ranges from -7 m to 3 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 16 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 55 m.

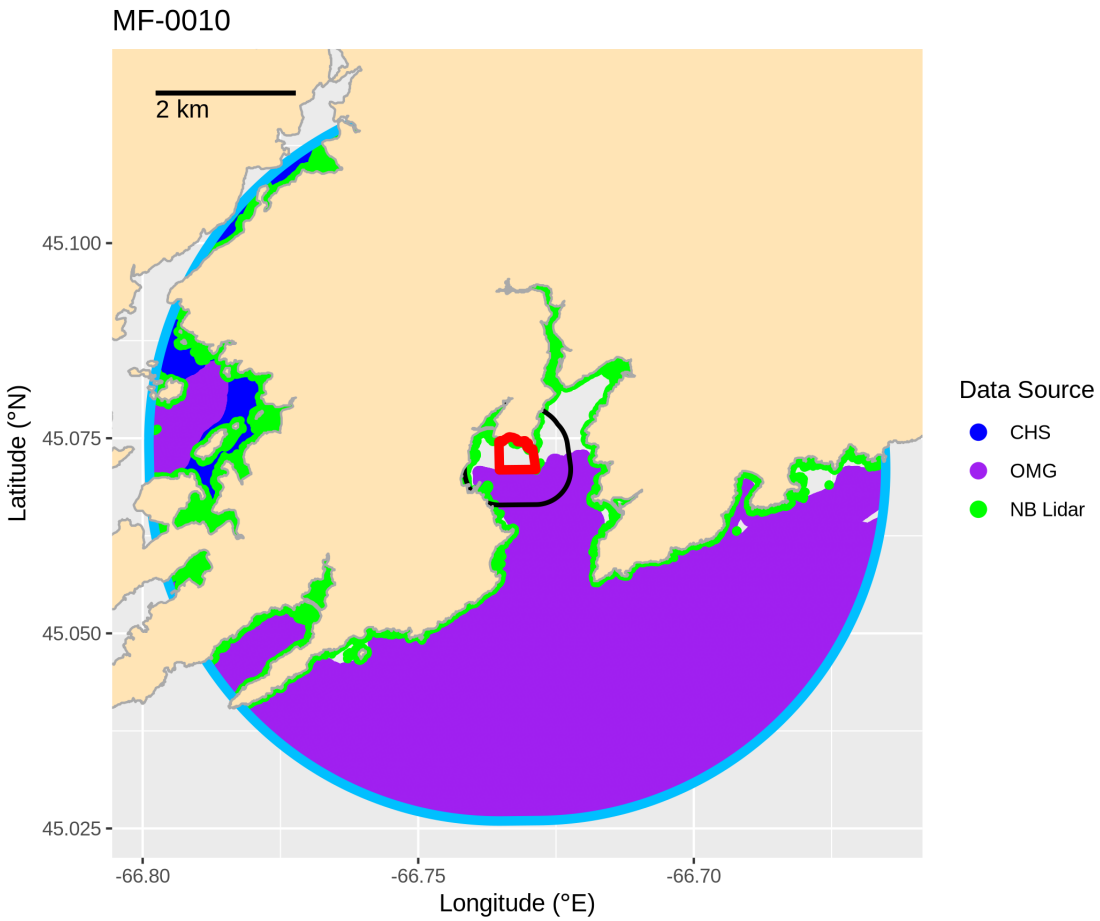


Figure 6.4.1. Farm MF-0010 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

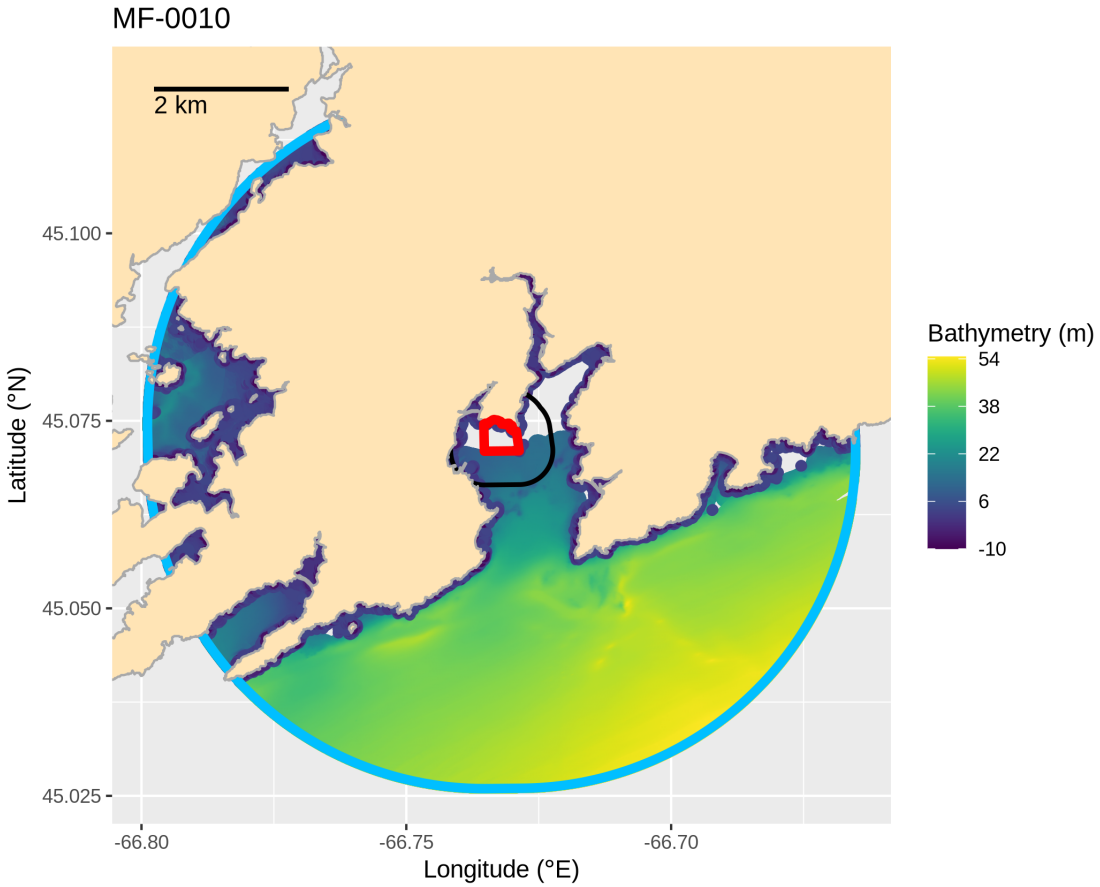


Figure 6.4.2. Farm MF-0010 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.5 Farm MF-0012

The lease centre for farm MF-0012 is 66.7344° W, 45.0646° N and the lease encompasses an area of 77208 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.5.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.5.2. Within the lease boundaries, the bathymetry ranges from -3 m to 16 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 26 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 57 m.

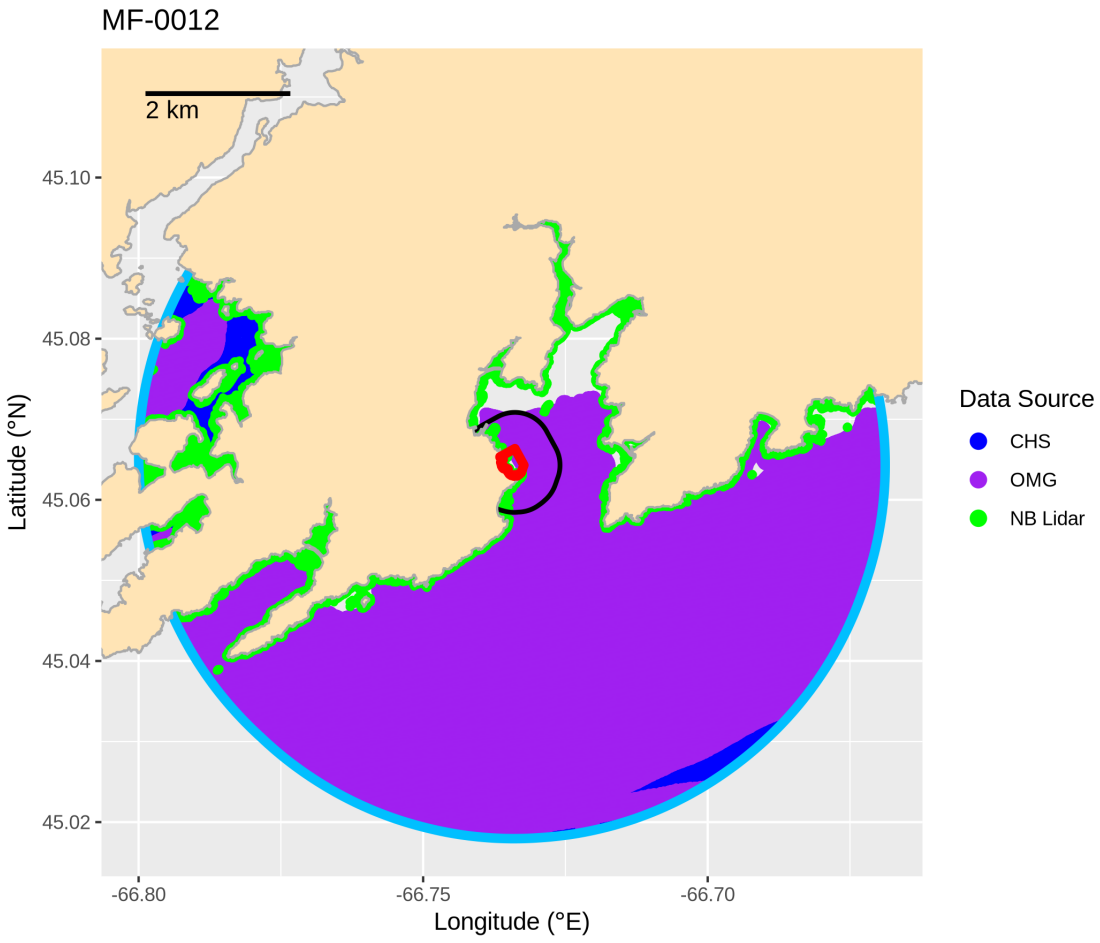


Figure 6.5.1. Farm MF-0012 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

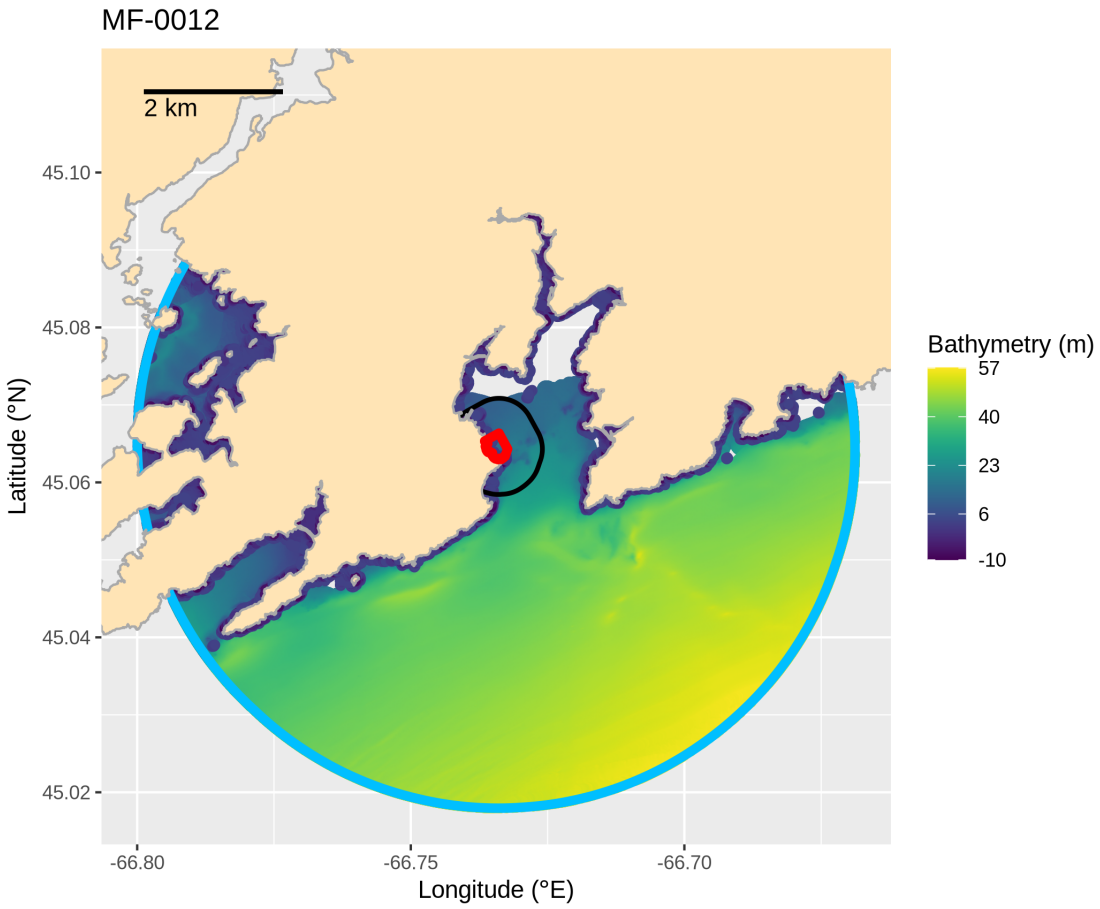


Figure 6.5.2. Farm MF-0012 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.6 Farm MF-0014

The lease centre for farm MF-0014 is 66.8086° W, 45.0683° N and the lease encompasses an area of 145209 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.6.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.6.2. Within the lease boundaries, the bathymetry ranges from -3 m to 23 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 24 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 103 m.

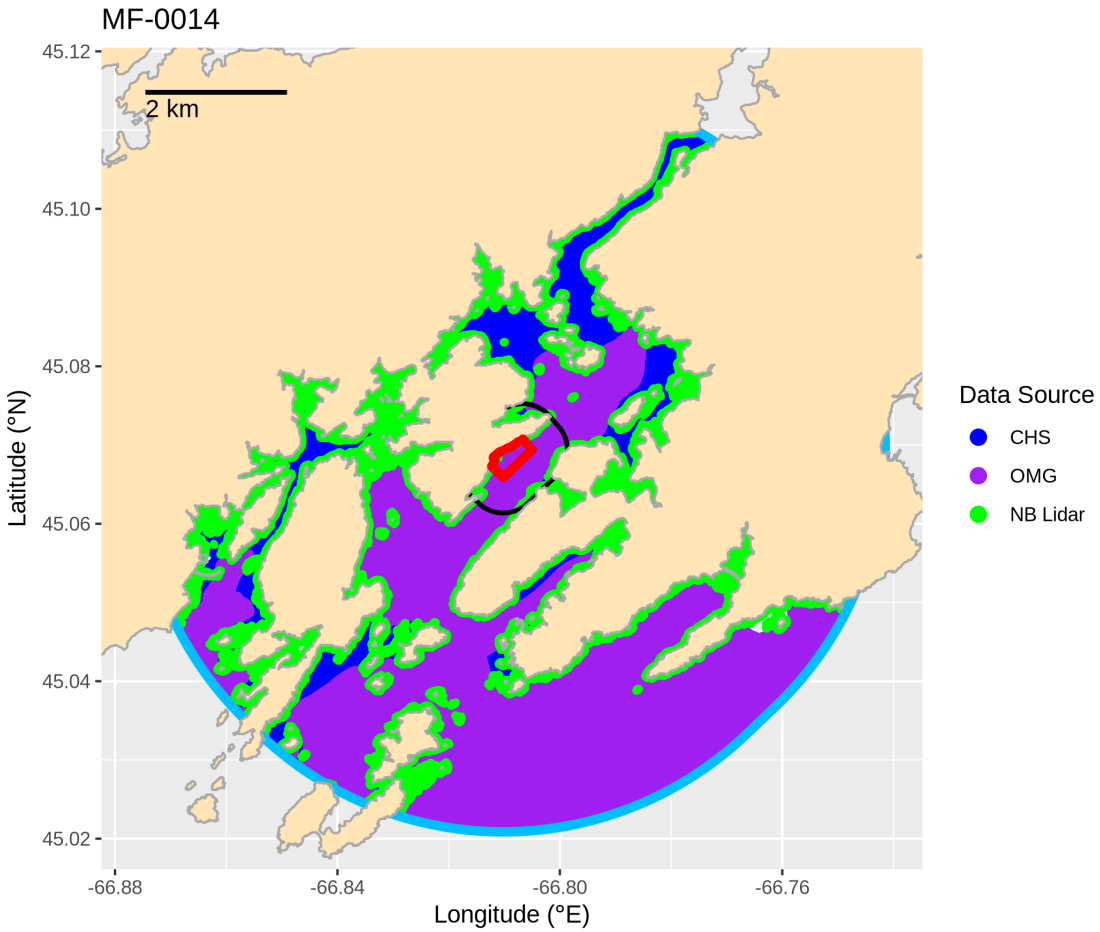


Figure 6.6.1. Farm MF-0014 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

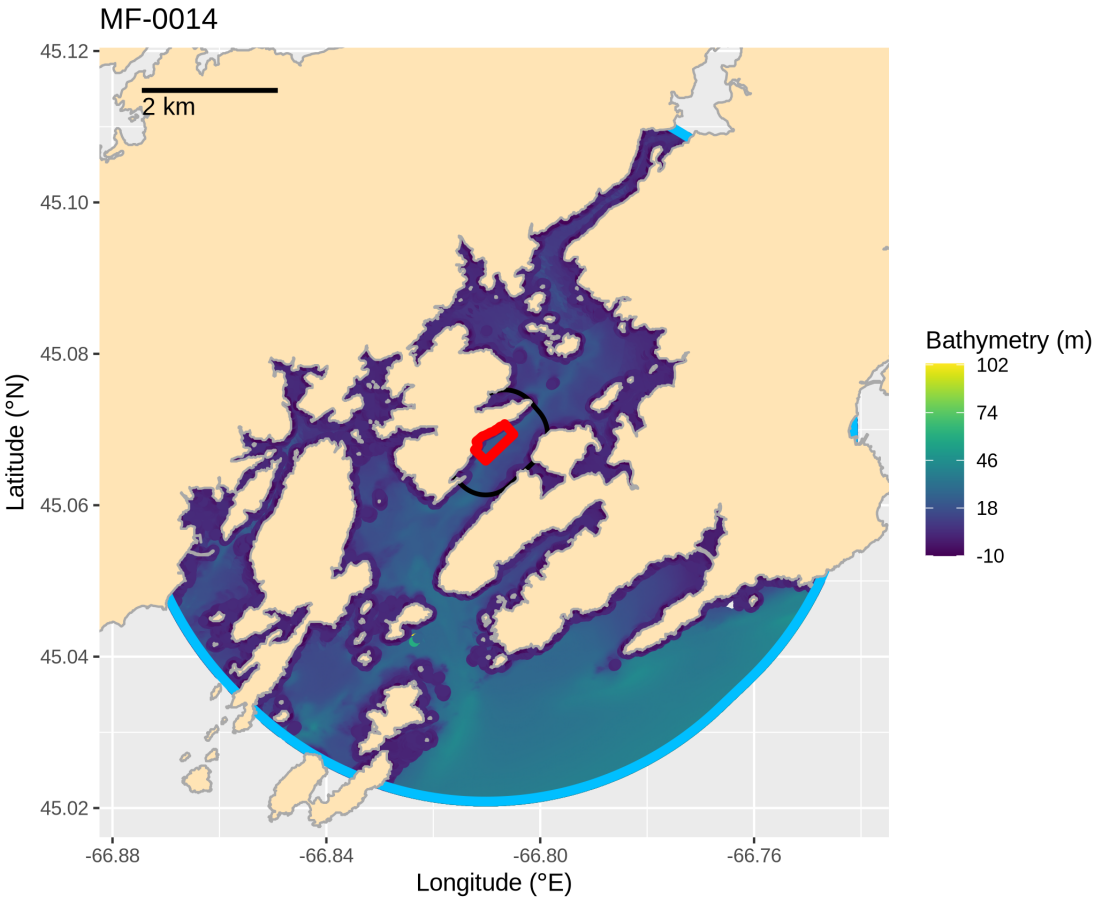


Figure 6.6.2. Farm MF-0014 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.7 Farm MF-0016

The lease centre for farm MF-0016 is 66.8149° W, 45.0632° N and the lease encompasses an area of 193216 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.7.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.7.2. Within the lease boundaries, the bathymetry ranges from -9 m to 25 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 79 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 103 m.

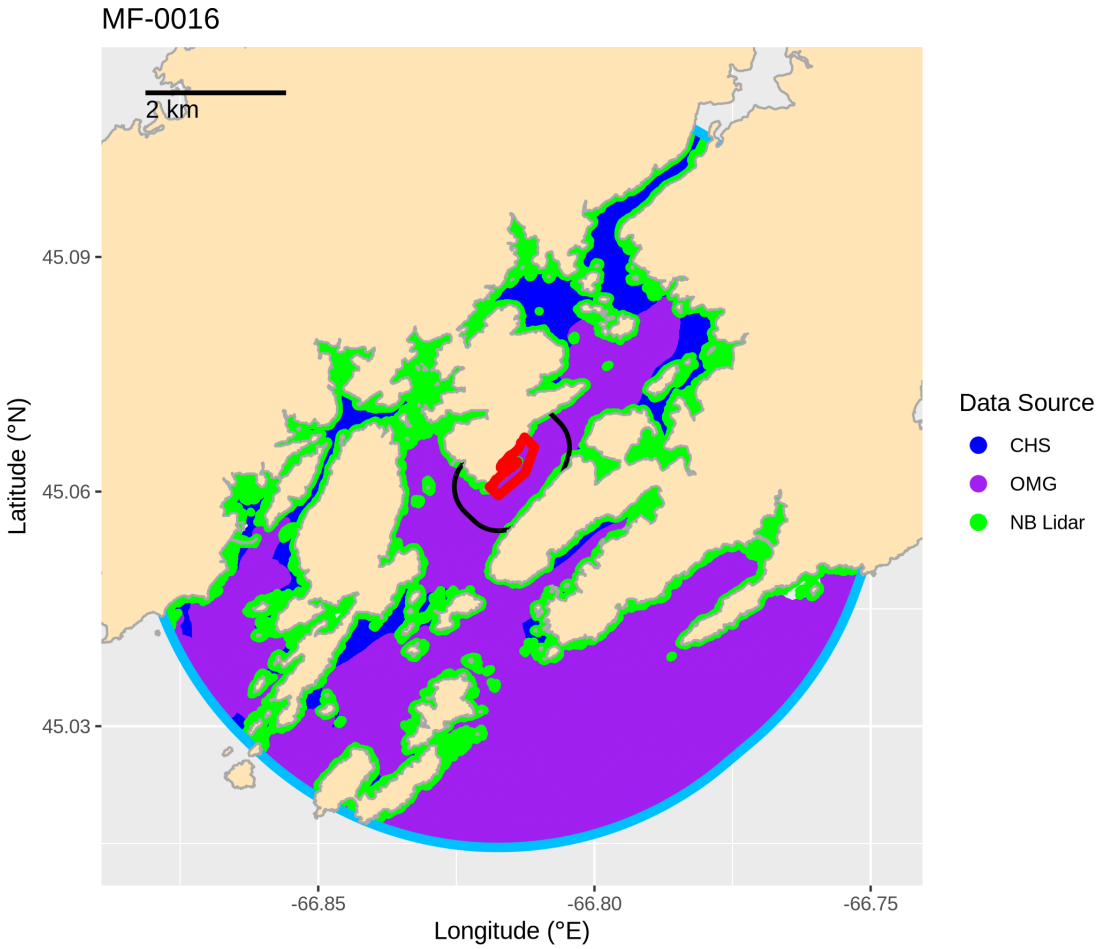


Figure 6.7.1. Farm MF-0016 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

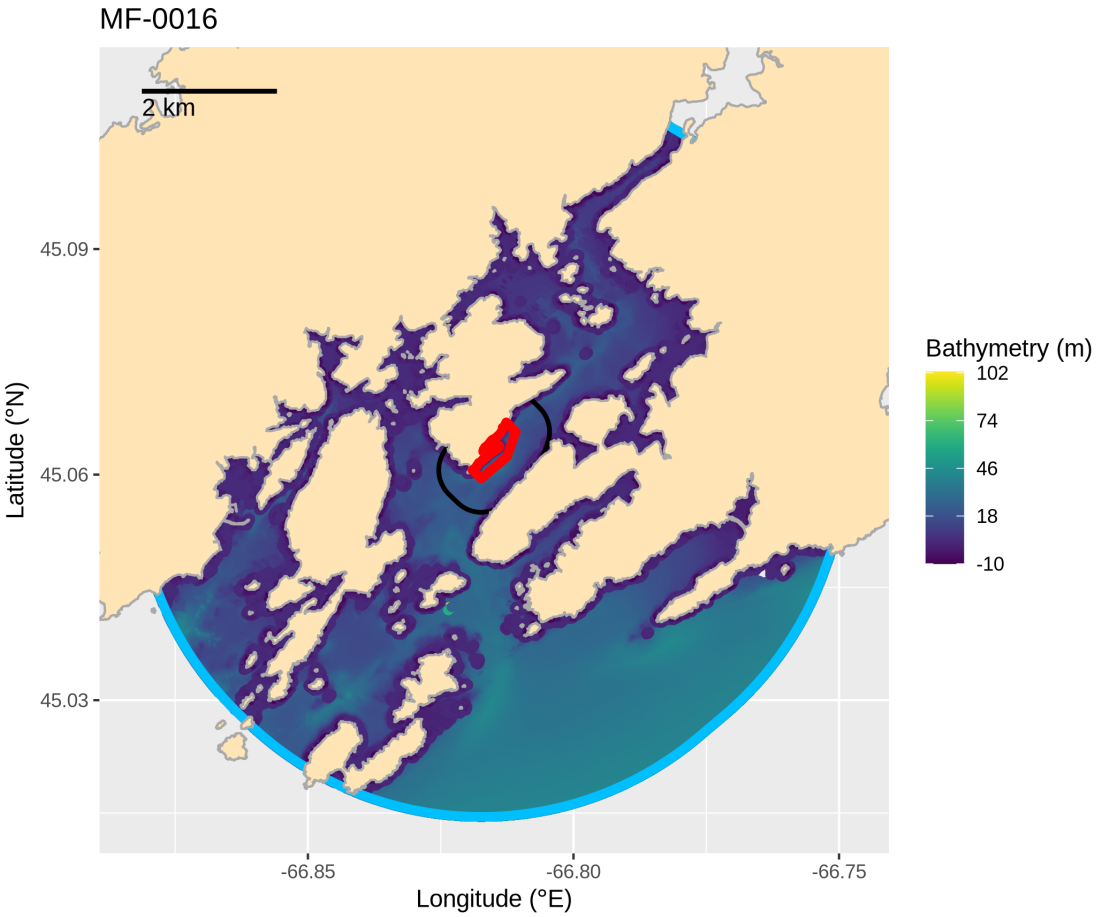


Figure 6.7.2. Farm MF-0016 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.8 Farm MF-0017

The lease centre for farm MF-0017 is 66.8079° W, 45.0621° N and the lease encompasses an area of 121215 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.8.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.8.2. Within the lease boundaries, the bathymetry ranges from -6 m to 22 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 29 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 103 m.

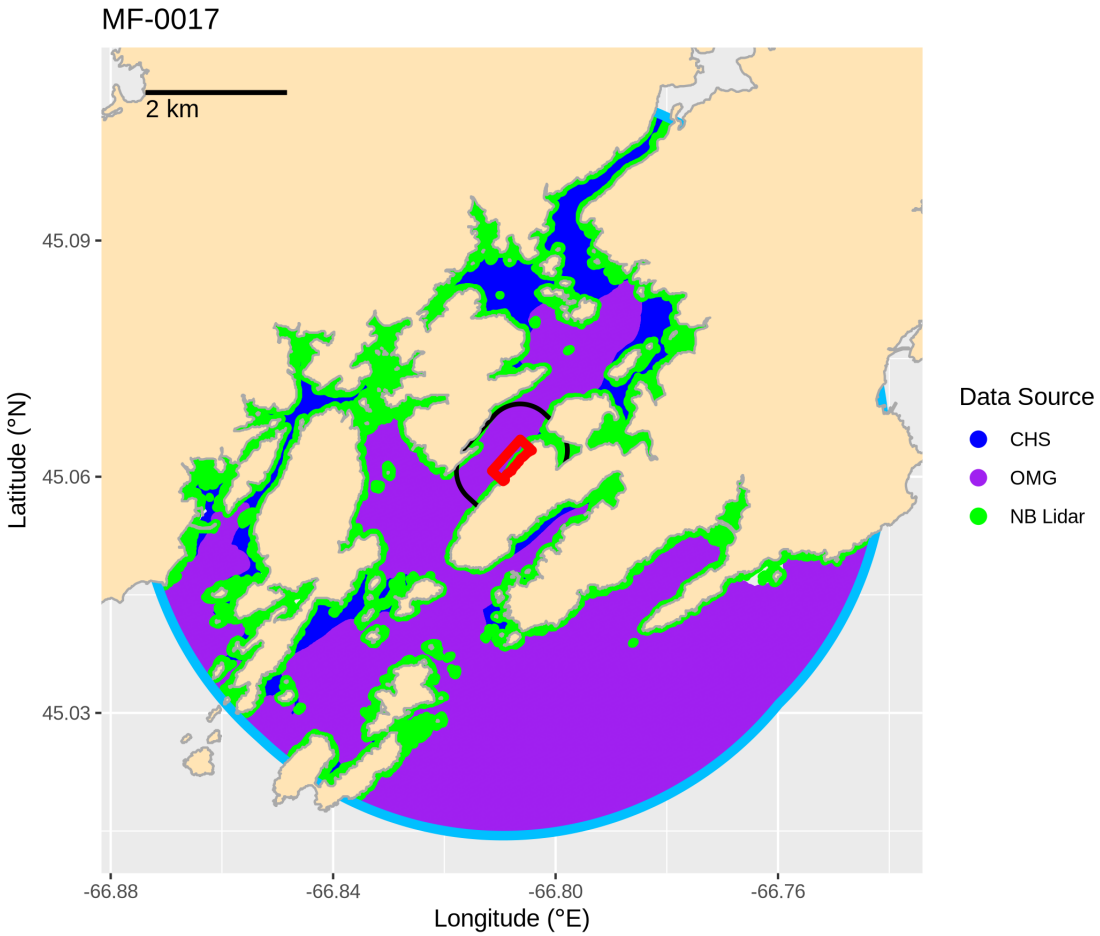


Figure 6.8.1. Farm MF-0017 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

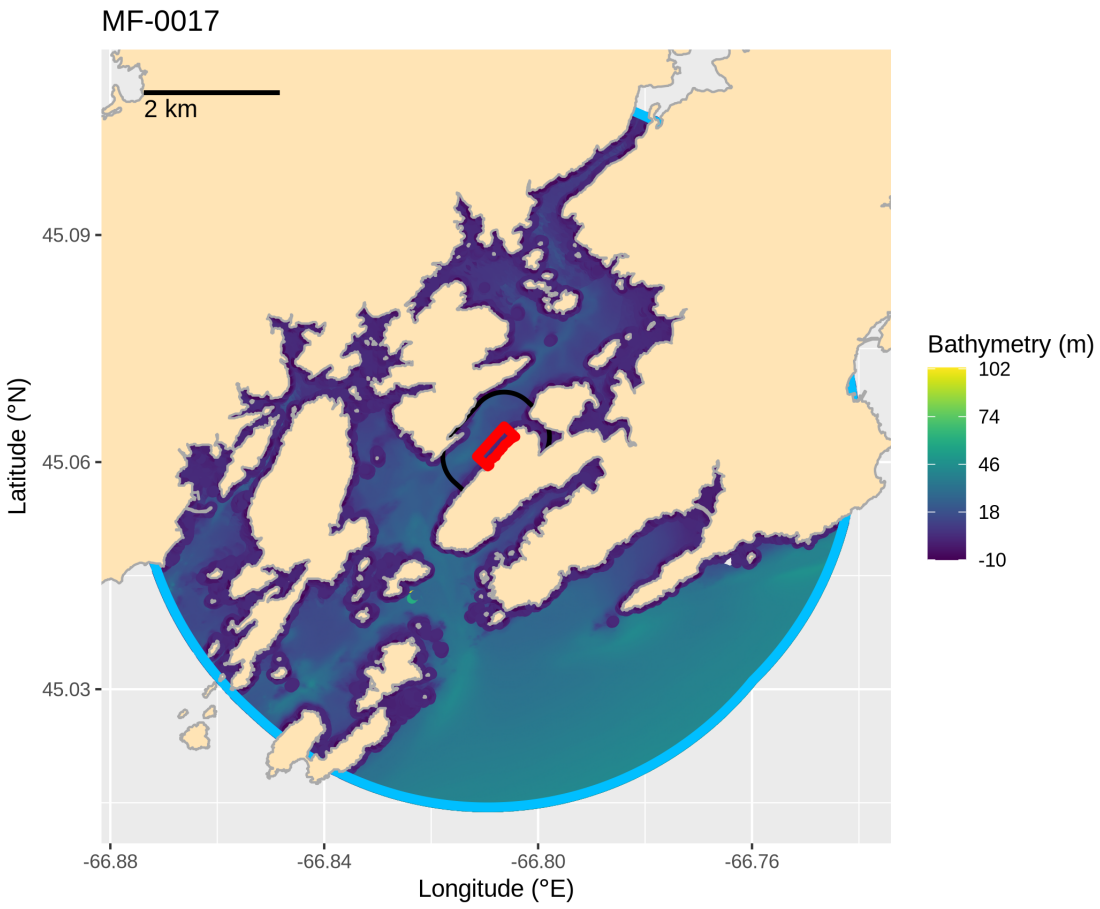


Figure 6.8.2. Farm MF-0017 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.9 Farm MF-0018

The lease centre for farm MF-0018 is 66.8229° W, 45.0603° N and the lease encompasses an area of 127740 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.9.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.9.2. Within the lease boundaries, the bathymetry ranges from -2 m to 79 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 79 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 103 m.

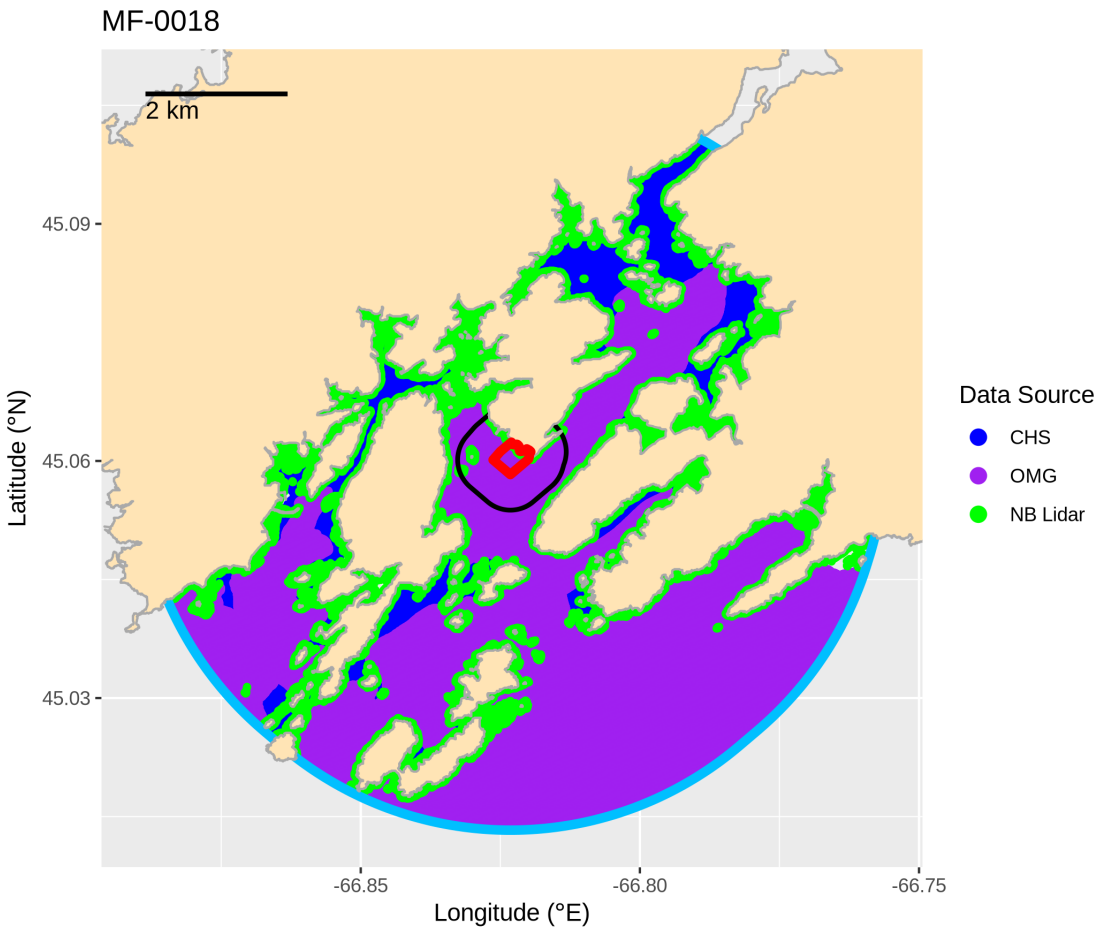


Figure 6.9.1. Farm MF-0018 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

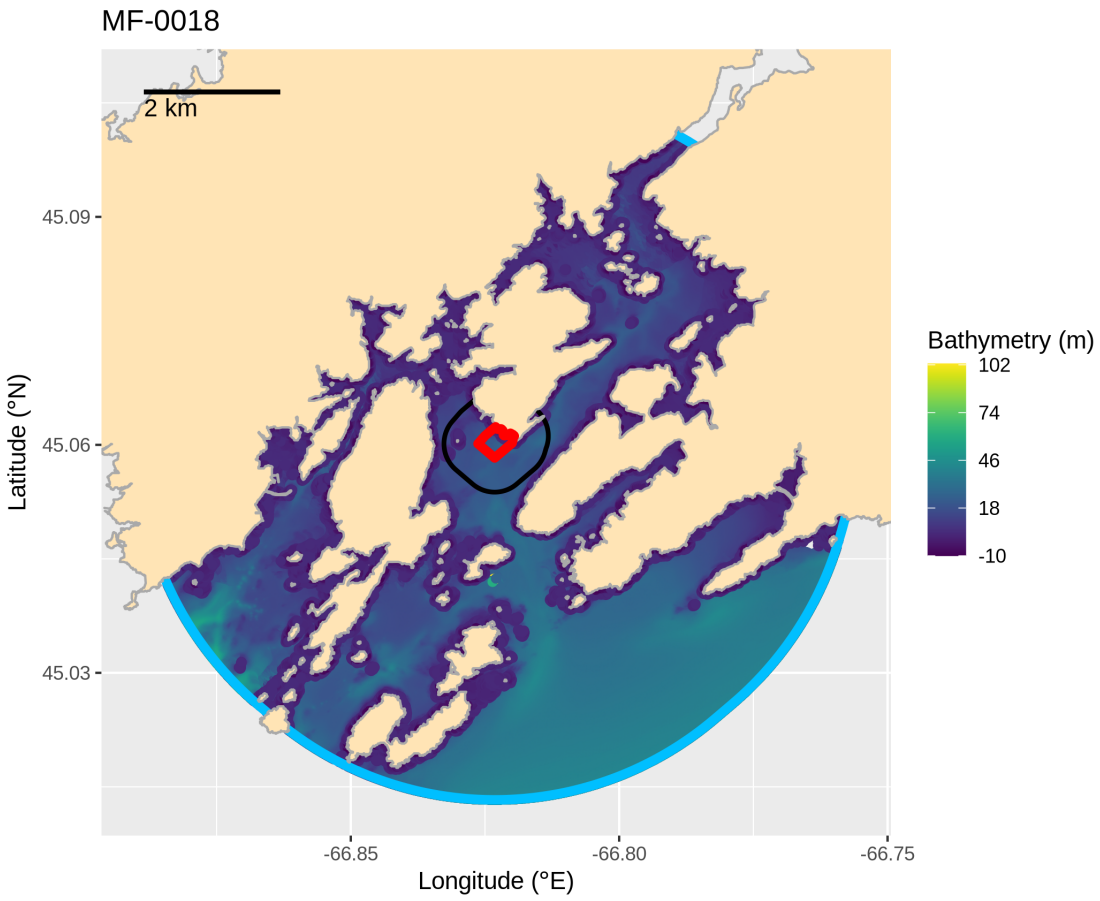


Figure 6.9.2. Farm MF-0018 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.10 Farm MF-0020

The lease centre for farm MF-0020 is 66.8328° W, 45.0619° N and the lease encompasses an area of 174231 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.10.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.10.2. Within the lease boundaries, the bathymetry ranges from -2 m to 17 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 24 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 103 m.

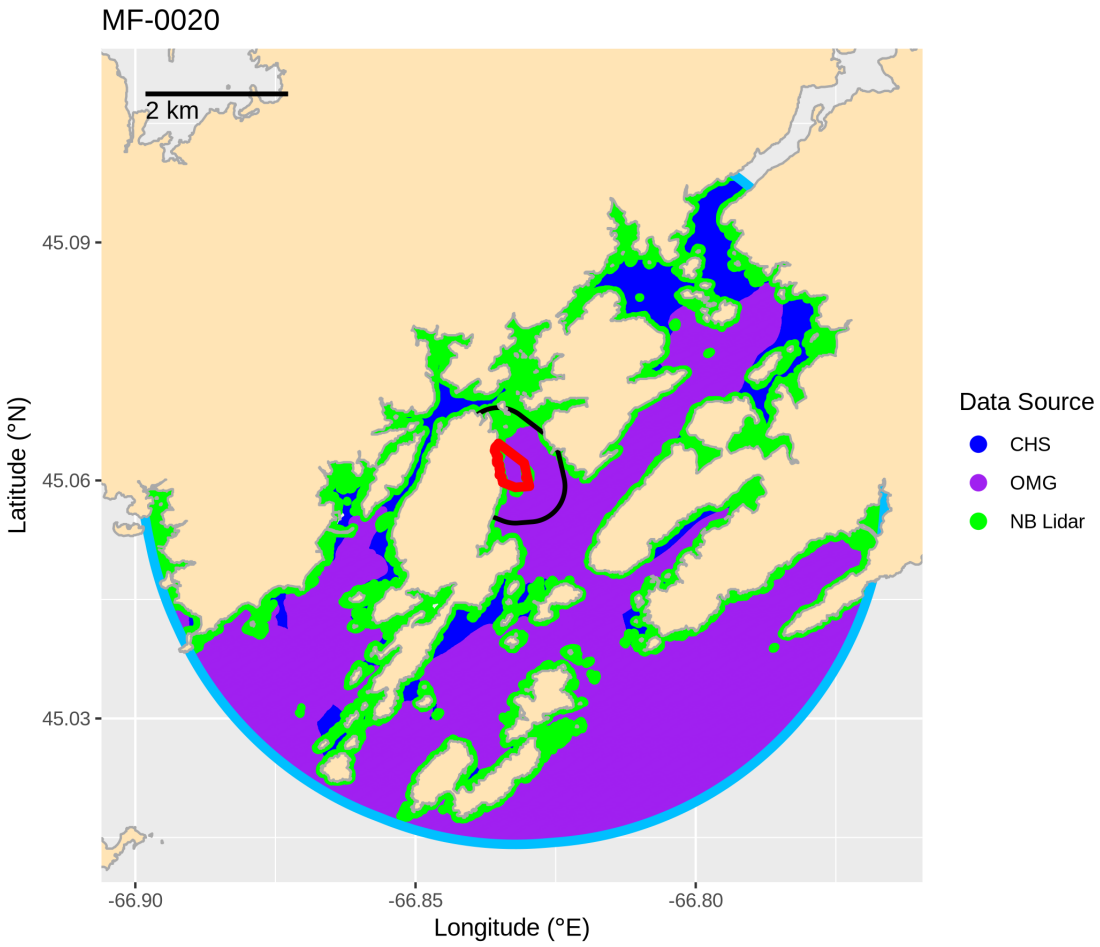


Figure 6.10.1. Farm MF-0020 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

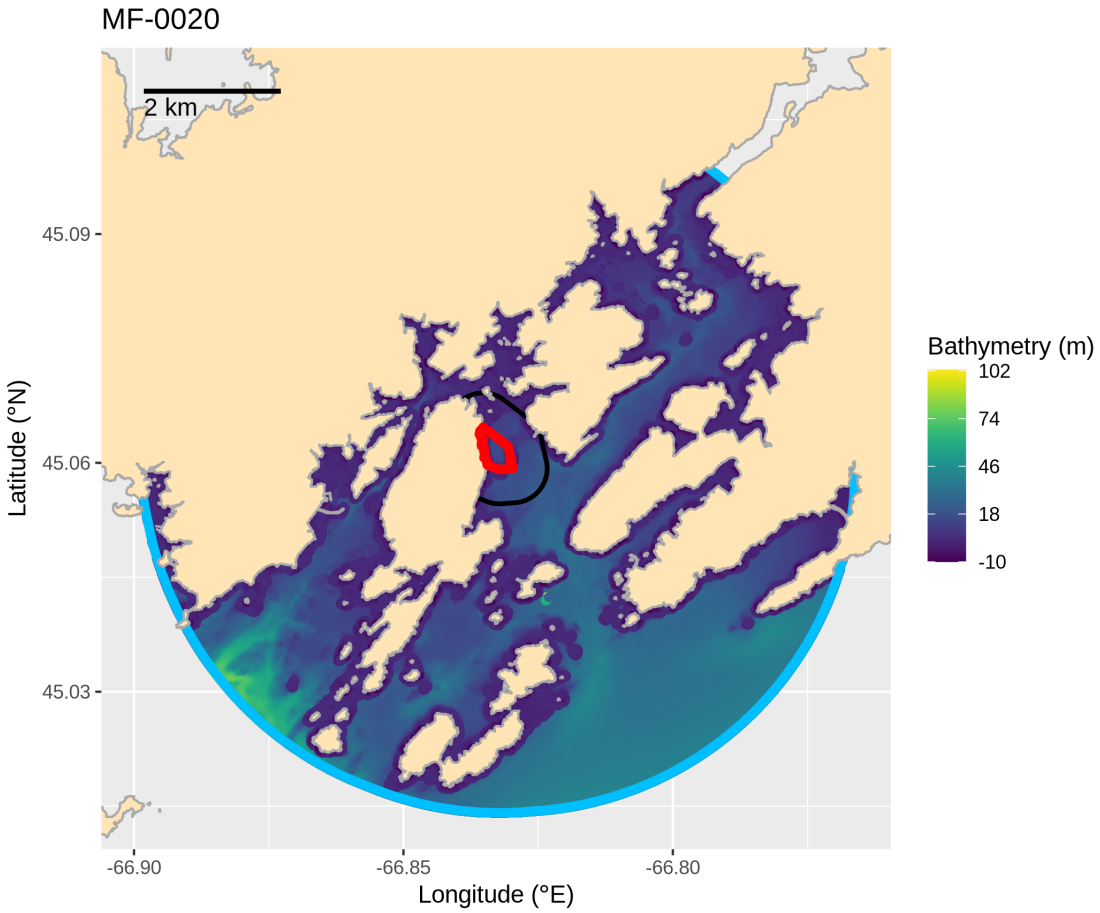


Figure 6.10.2. Farm MF-0020 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.11 Farm MF-0022

The lease centre for farm MF-0022 is 66.8299° W, 45.0535° N and the lease encompasses an area of 108102 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.11.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.11.2. Within the lease boundaries, the bathymetry ranges from -4 m to 20 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 31 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 103 m.

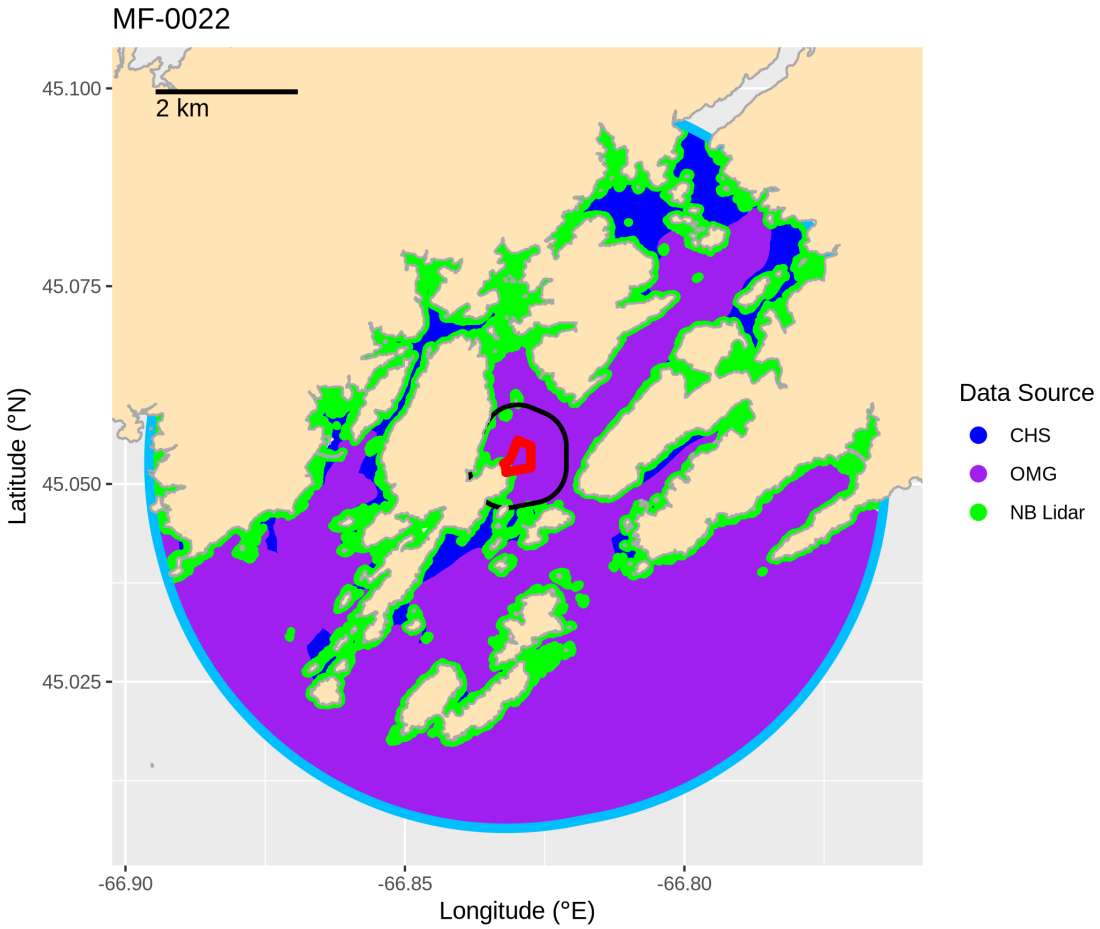


Figure 6.11.1. Farm MF-0022 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

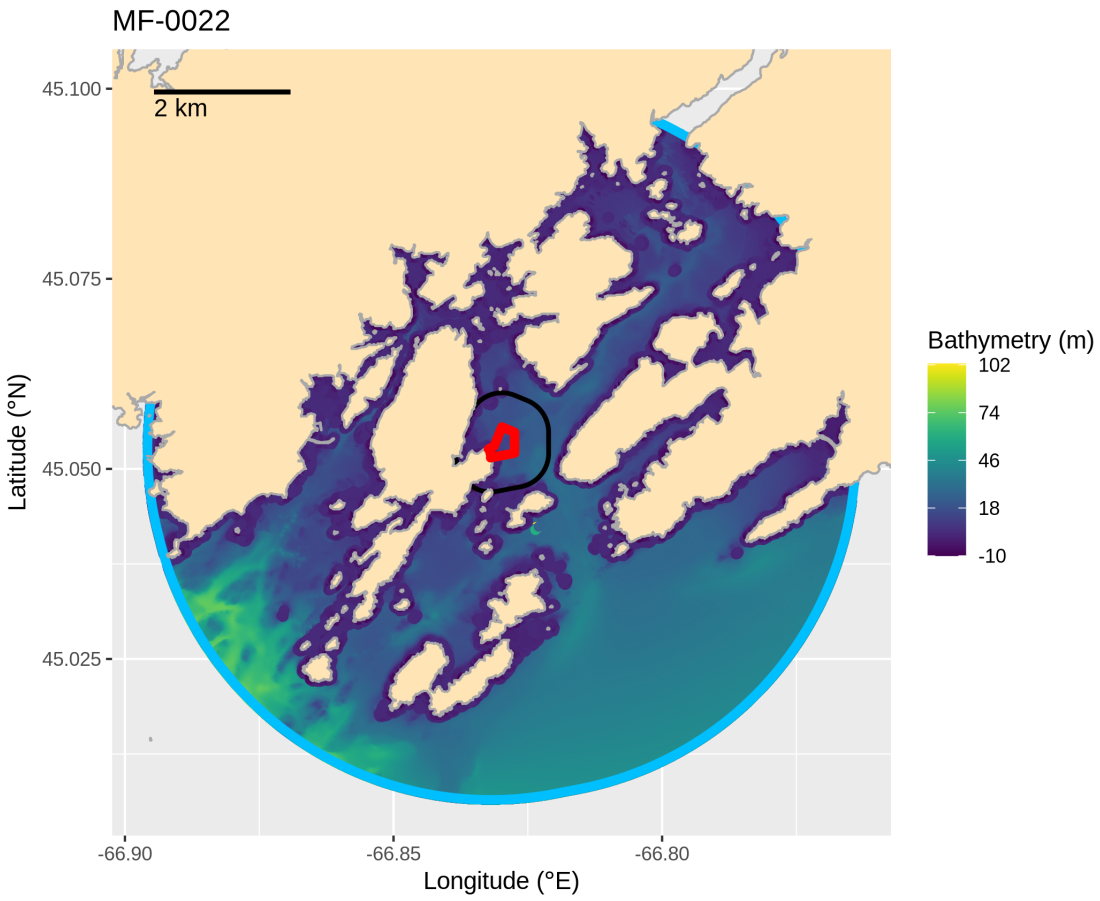


Figure 6.11.2. Farm MF-0022 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.12 Farm MF-0023

The lease centre for farm MF-0023 is 66.8299° W, 45.0490° N and the lease encompasses an area of 145983 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.12.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.12.2. Within the lease boundaries, the bathymetry ranges from -9 m to 24 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 31 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 124 m.

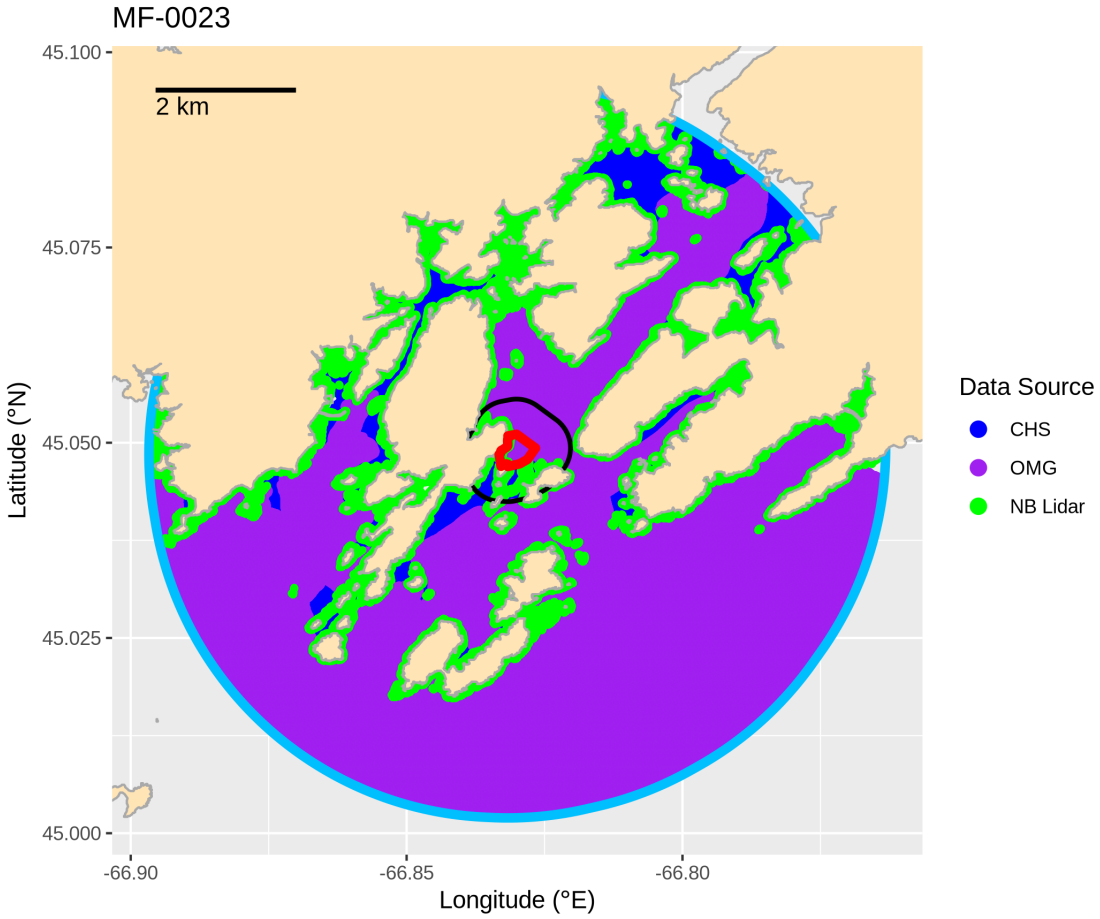


Figure 6.12.1. Farm MF-0023 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

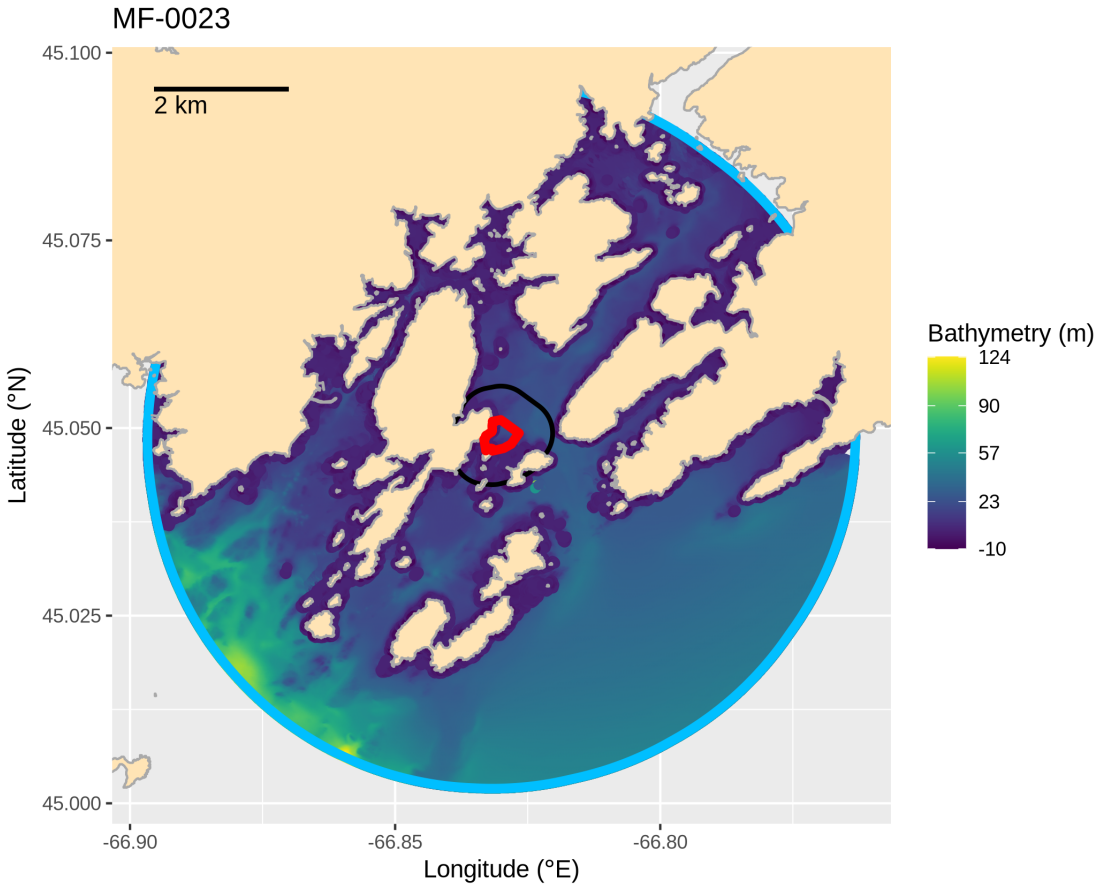


Figure 6.12.2. Farm MF-0023 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.13 Farm MF-0024

The lease centre for farm MF-0024 is 66.8183° W, 45.0558° N and the lease encompasses an area of 106278 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.13.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.13.2. Within the lease boundaries, the bathymetry ranges from 17 m to 24 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 79 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 103 m.

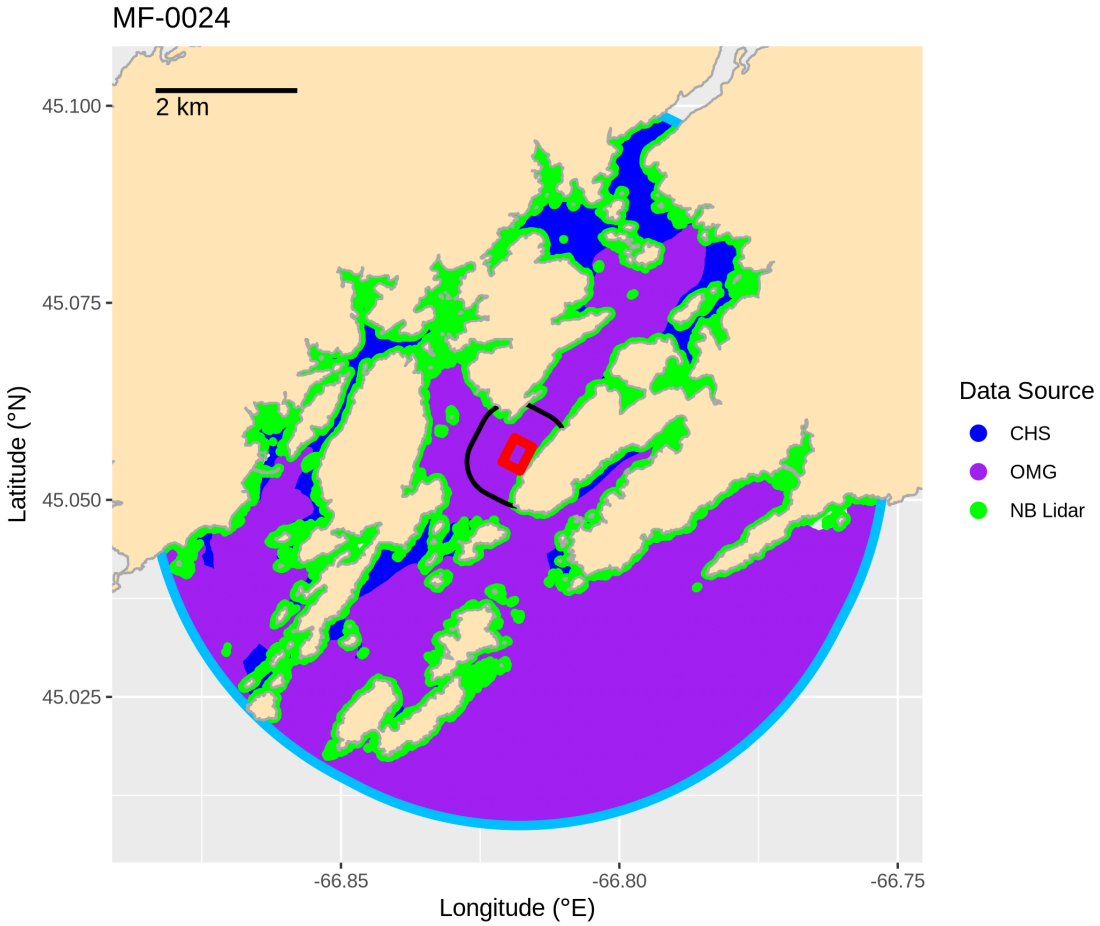


Figure 6.13.1. Farm MF-0024 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

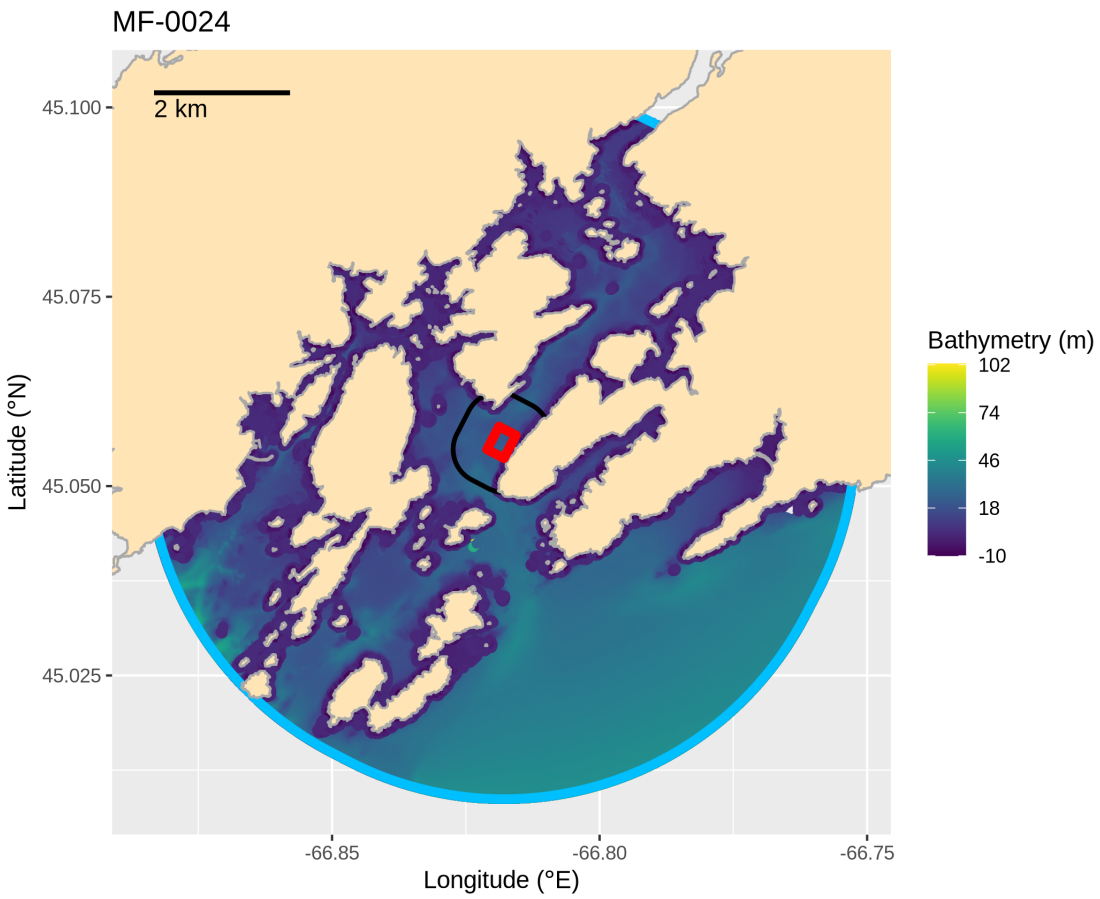


Figure 6.13.2. Farm MF-0024 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.14 Farm MF-0026

The lease centre for farm MF-0026 is 66.8263° W, 45.0419° N and the lease encompasses an area of 235715 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.14.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.14.2. Within the lease boundaries, the bathymetry ranges from -5 m to 103 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 103 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 135 m.

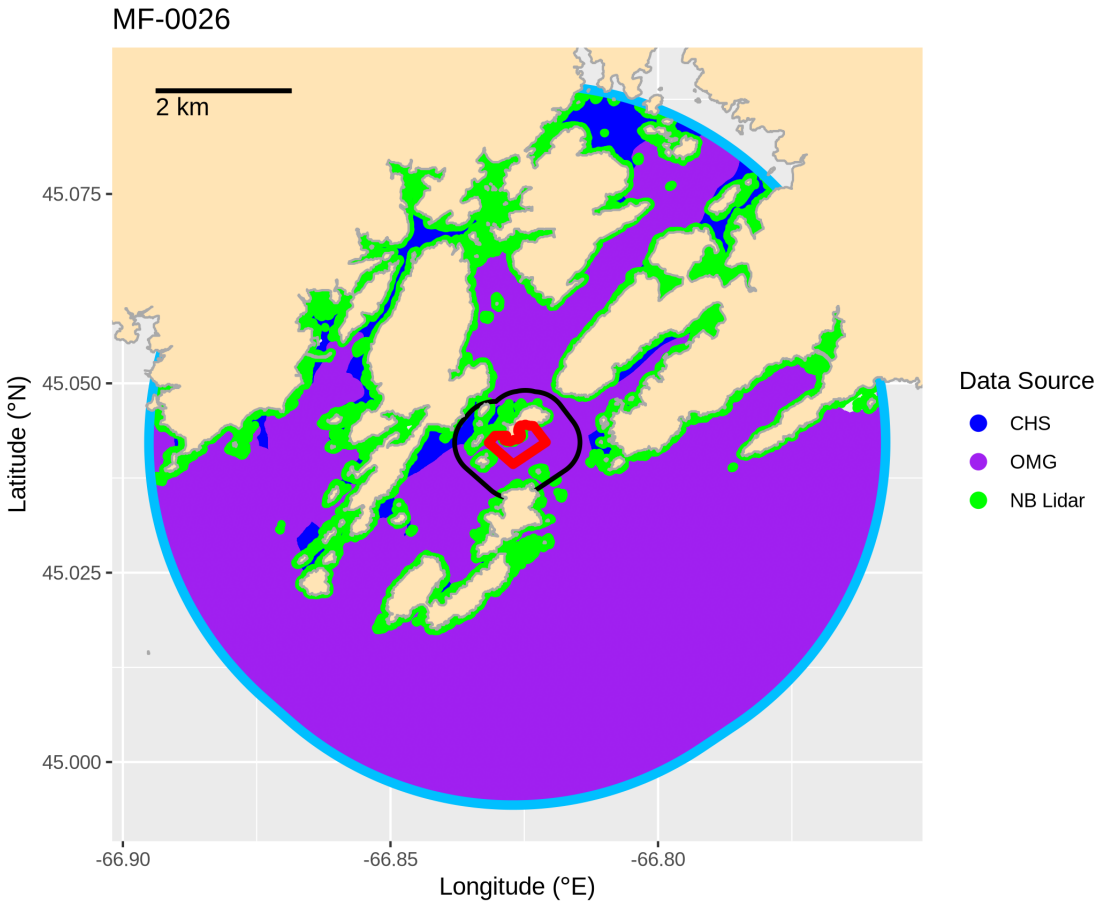


Figure 6.14.1. Farm MF-0026 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

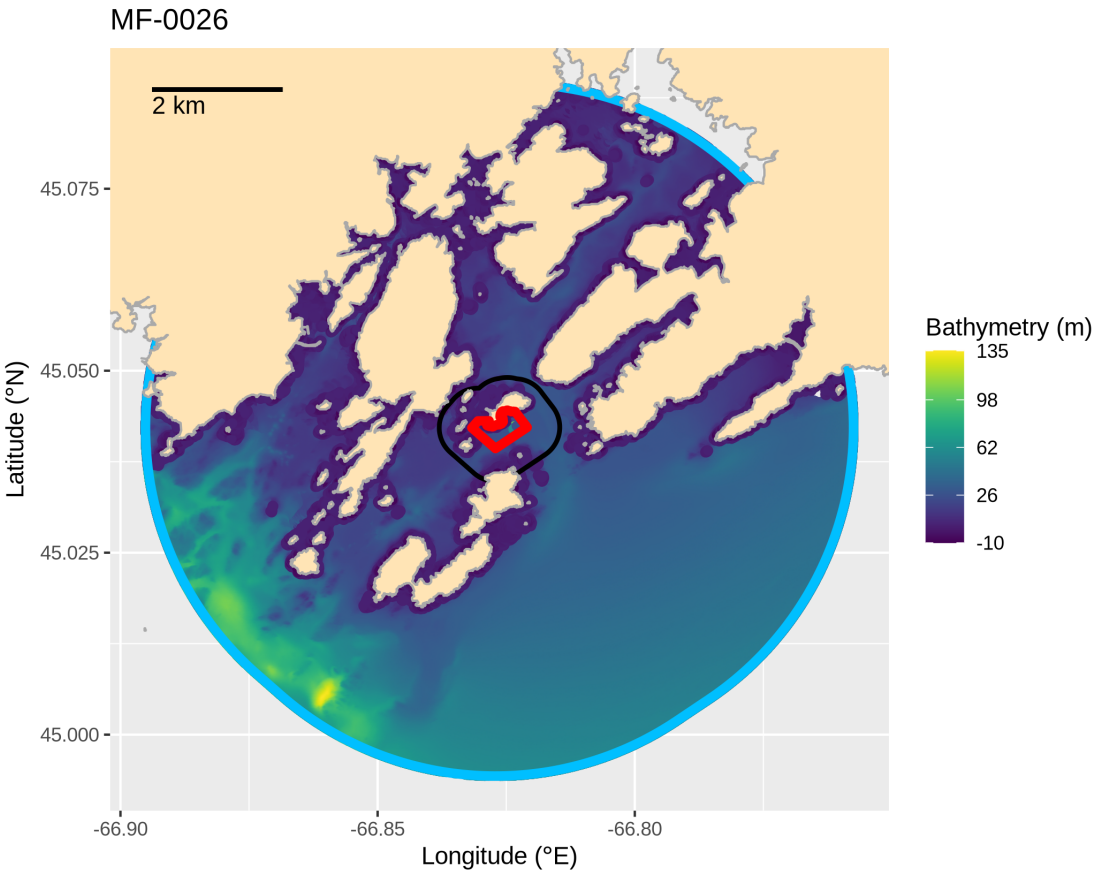


Figure 6.14.2. Farm MF-0026 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.15 Farm MF-0027

The lease centre for farm MF-0027 is 66.8375° W, 45.0410° N and the lease encompasses an area of 310378 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.15.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.15.2. Within the lease boundaries, the bathymetry ranges from -2 m to 23 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 28 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 135 m.

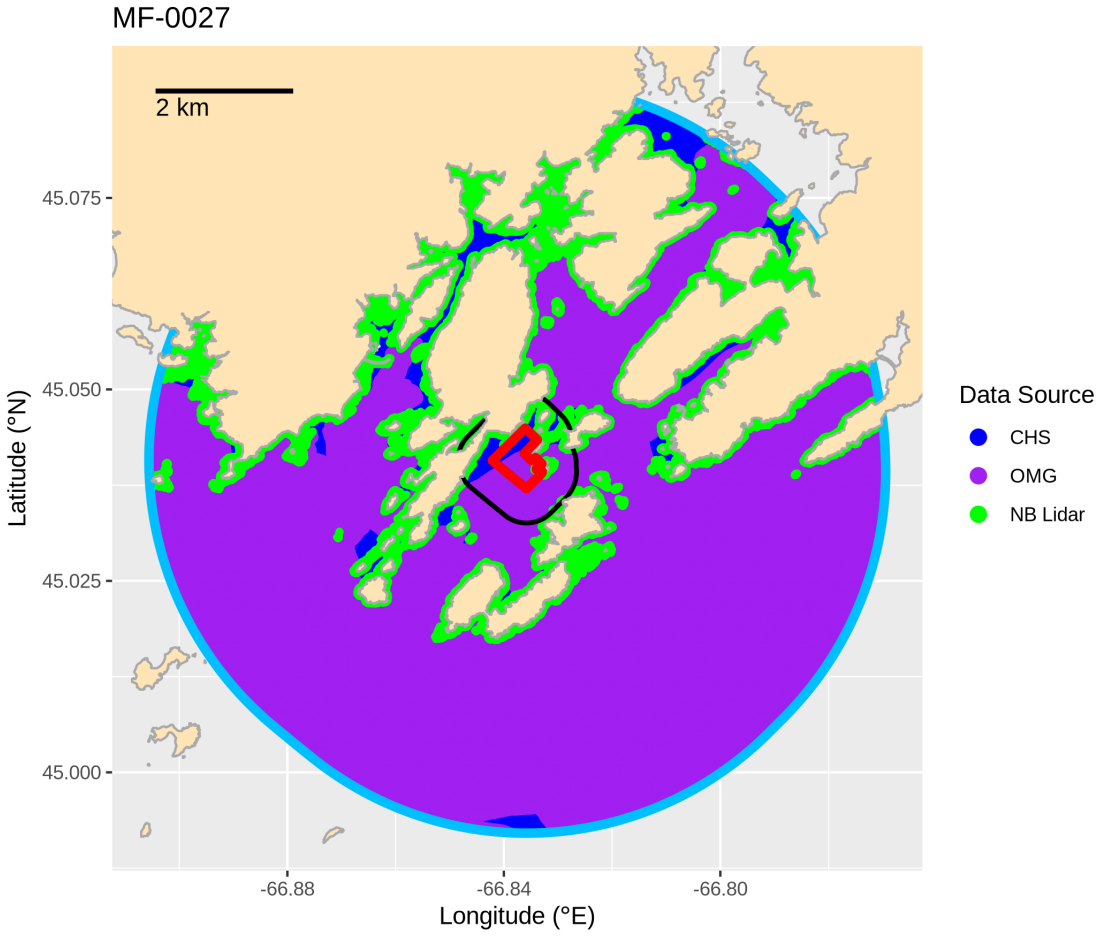


Figure 6.15.1. Farm MF-0027 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

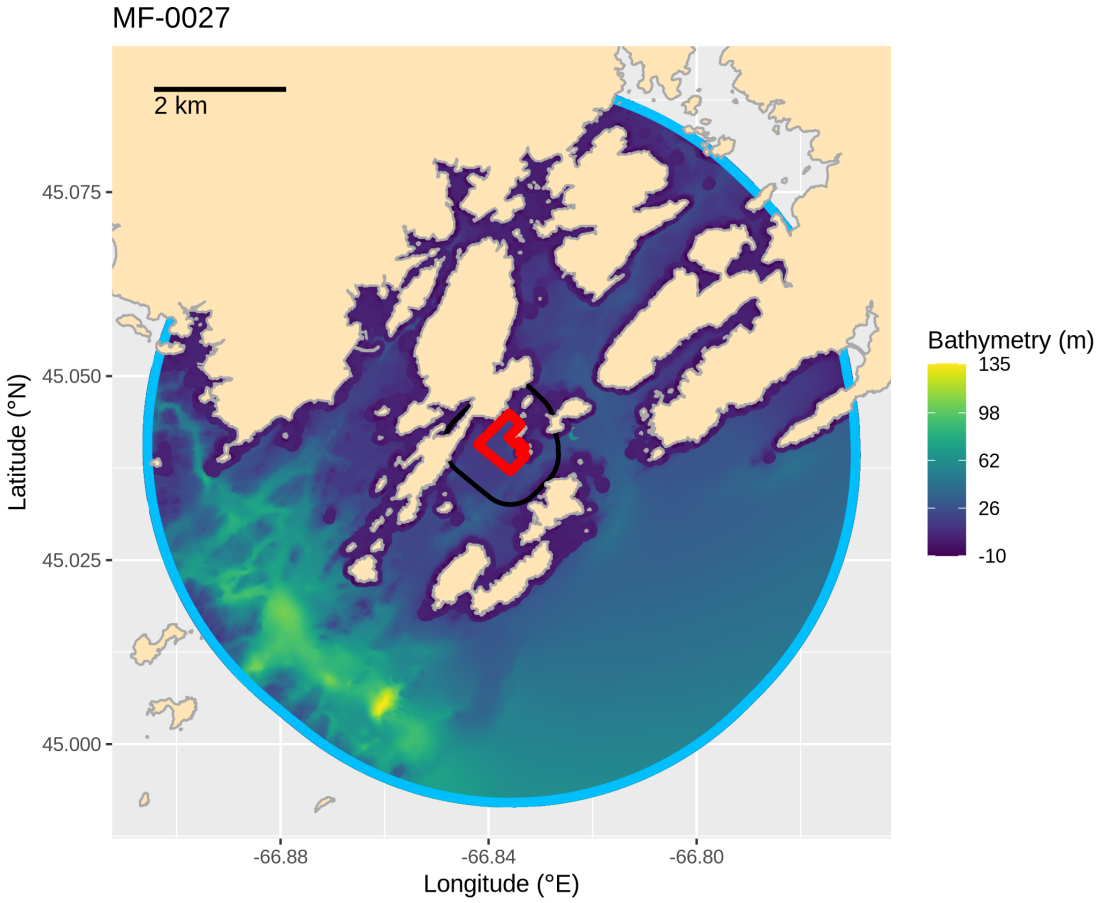


Figure 6.15.2. Farm MF-0027 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.16 Farm MF-0029

The lease centre for farm MF-0029 is 66.8342° W, 45.0339° N and the lease encompasses an area of 198748 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.16.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.16.2. Within the lease boundaries, the bathymetry ranges from 6 m to 27 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 39 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 135 m.

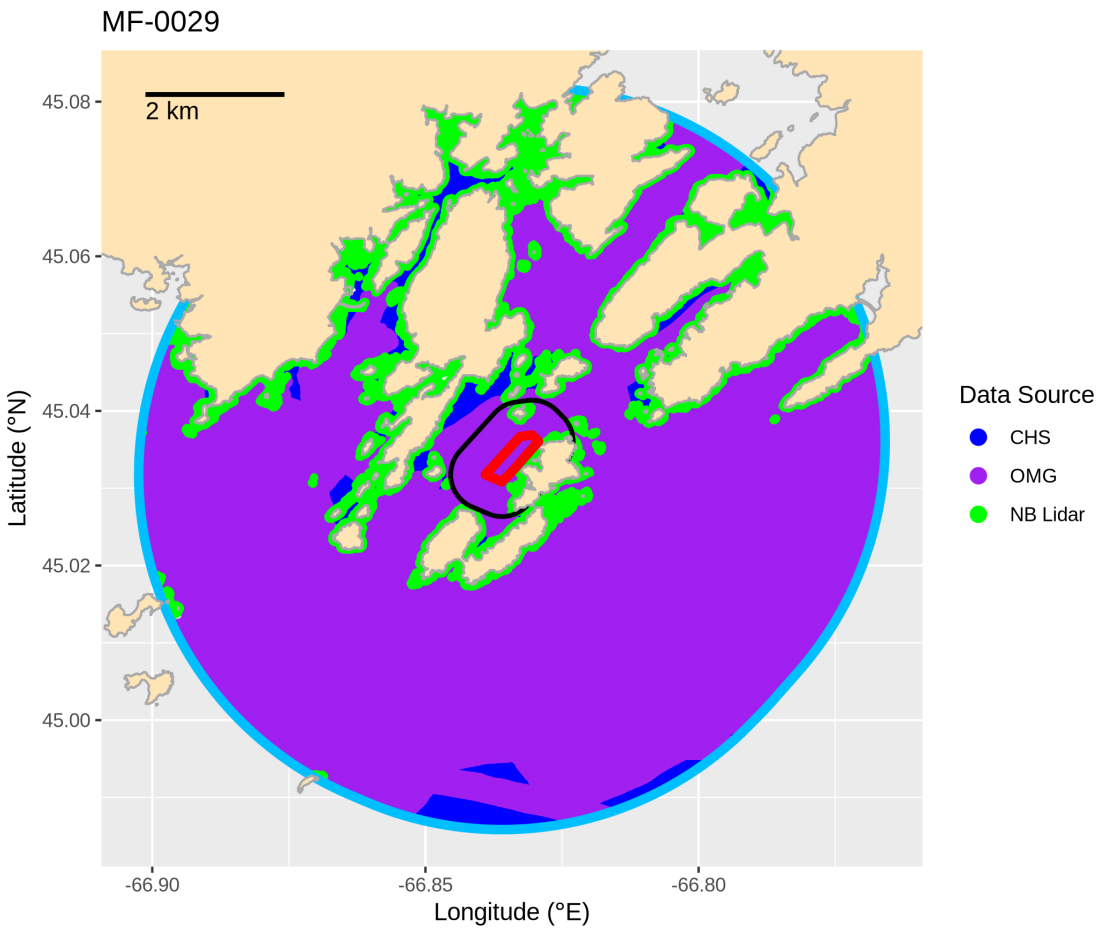


Figure 6.16.1. Farm MF-0029 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

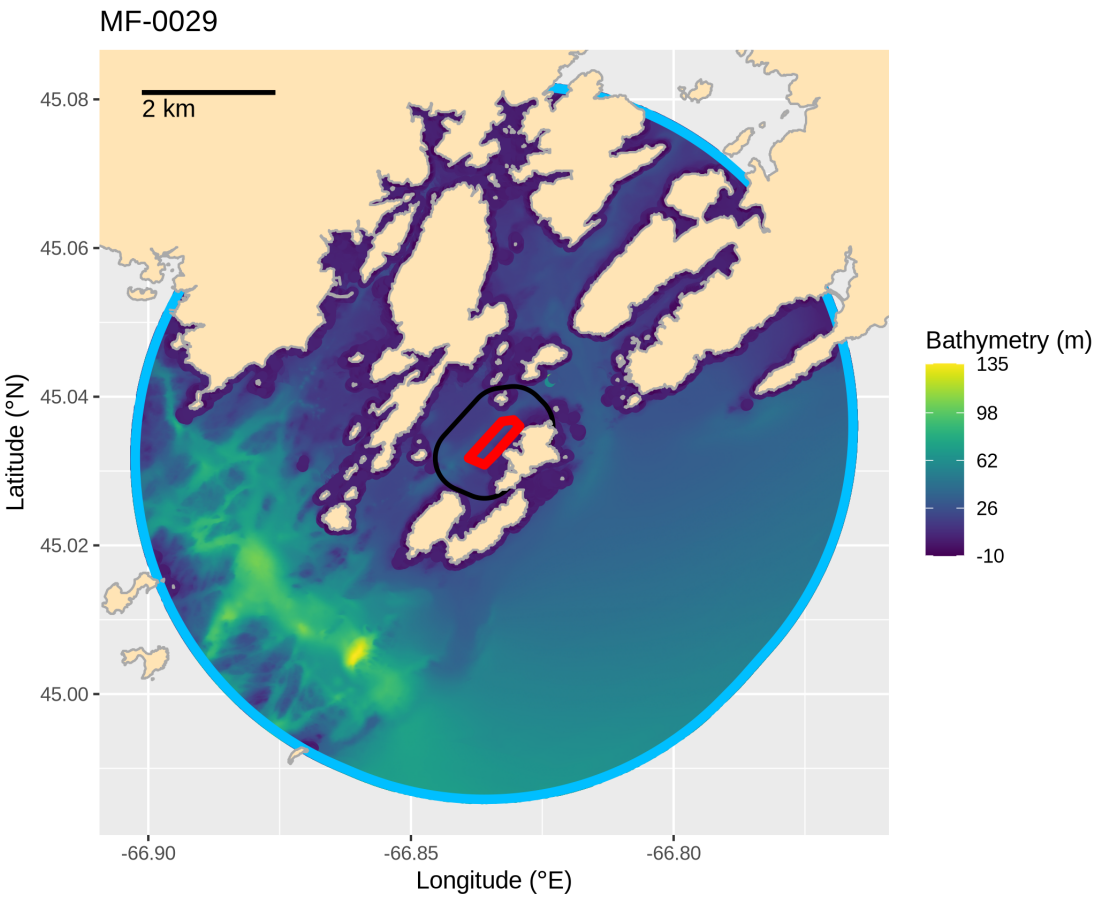


Figure 6.16.2. Farm MF-0029 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.17 Farm MF-0032

The lease centre for farm MF-0032 is 66.8439° W, 45.0348° N and the lease encompasses an area of 253296 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.17.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.17.2. Within the lease boundaries, the bathymetry ranges from 8 m to 30 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 39 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 135 m.

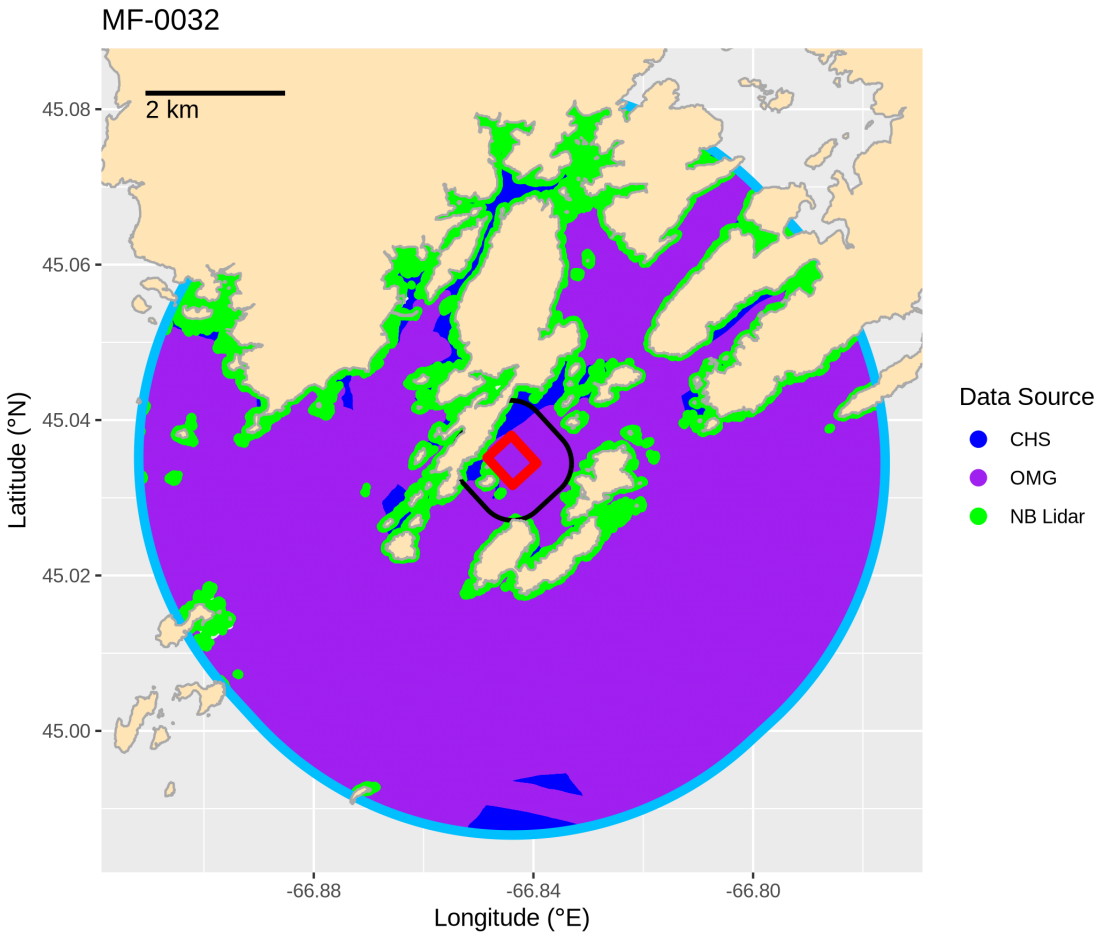


Figure 6.17.1. Farm MF-0032 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

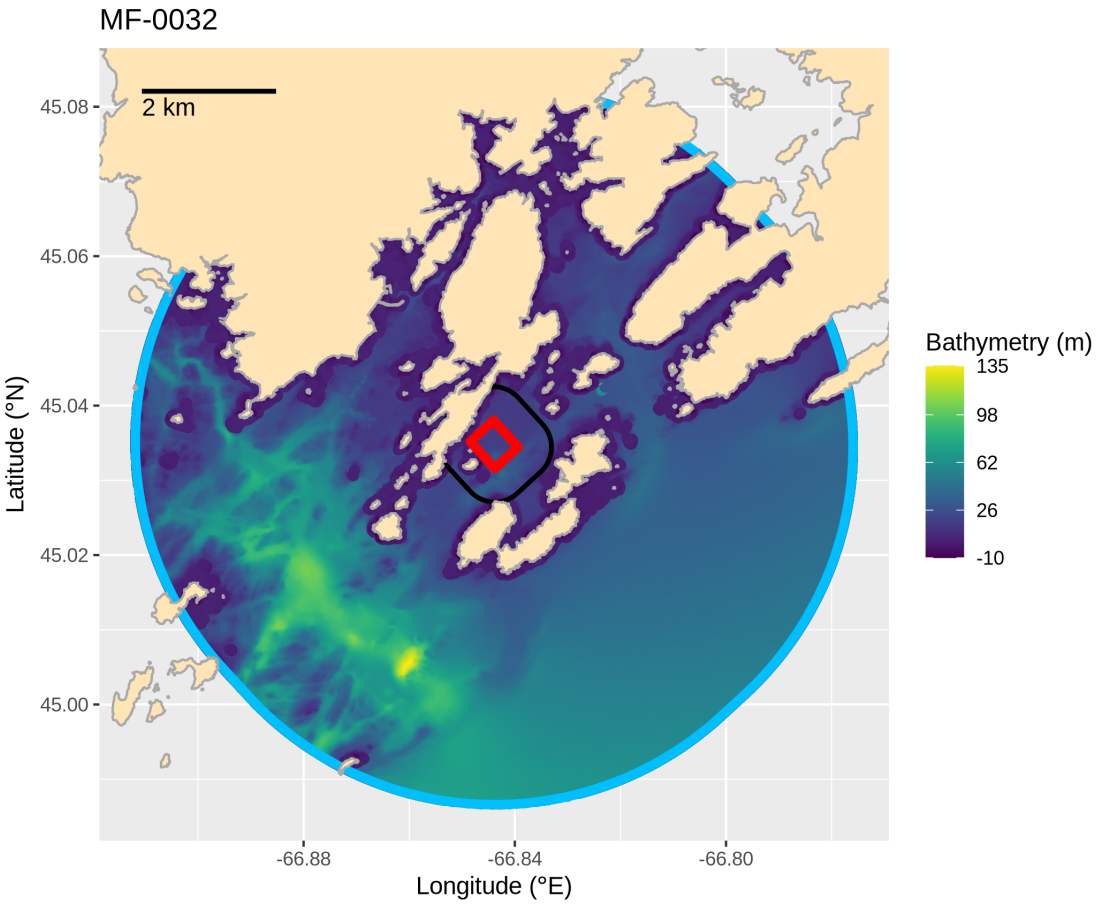


Figure 6.17.2. Farm MF-0032 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.18 Farm MF-0033

The lease centre for farm MF-0033 is 66.8510° W, 45.0592° N and the lease encompasses an area of 56756 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.18.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.18.2. Within the lease boundaries, the bathymetry ranges from -2 m to 24 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 25 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 105 m.

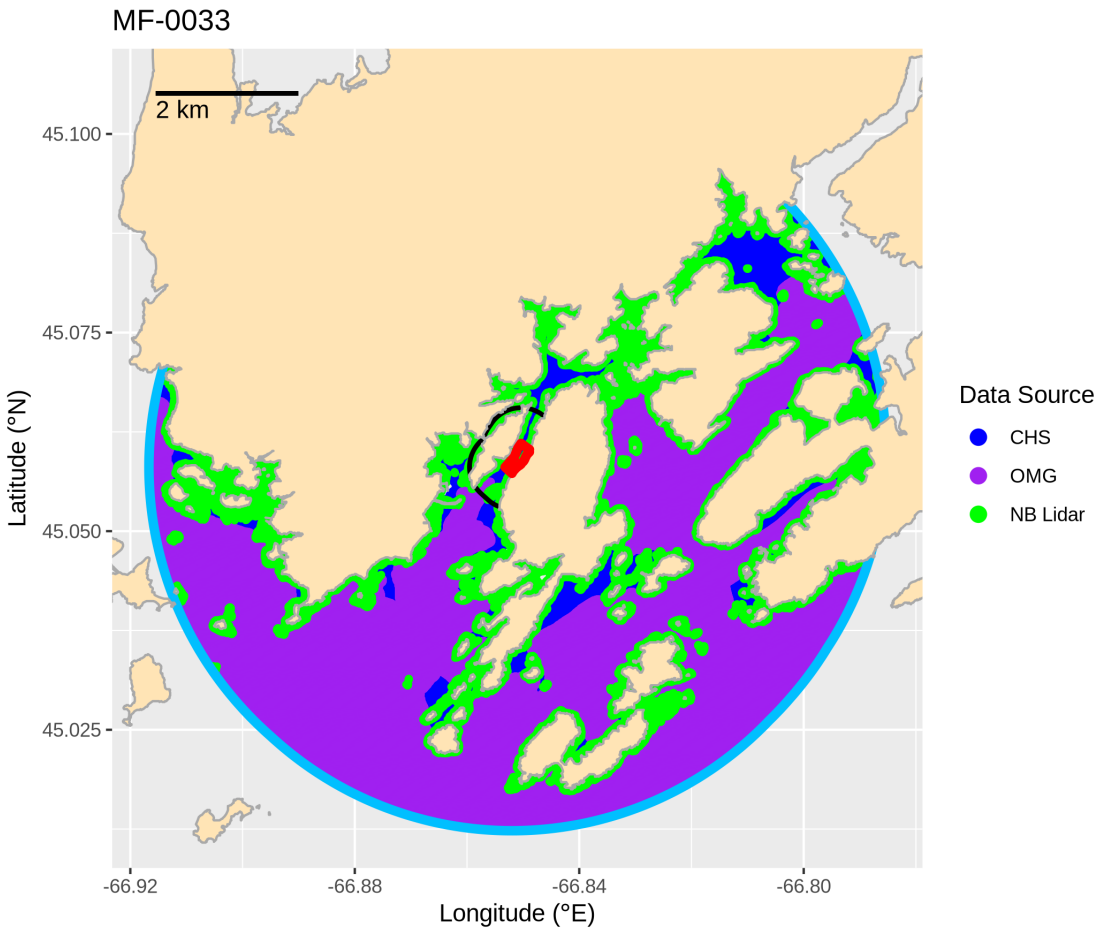


Figure 6.18.1. Farm MF-0033 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

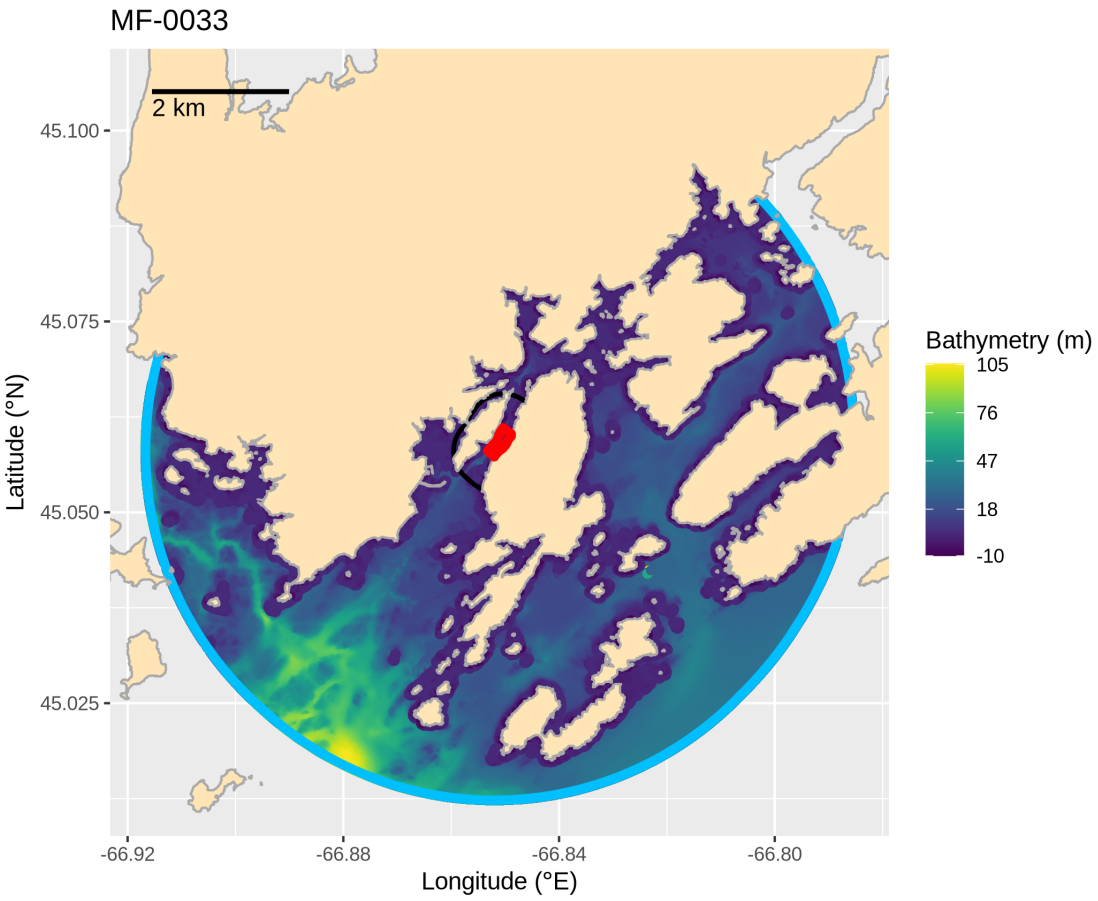


Figure 6.18.2. Farm MF-0033 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.19 Farm MF-0034

The lease centre for farm MF-0034 is 66.8564° W, 45.0562° N and the lease encompasses an area of 64999 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.19.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.19.2. Within the lease boundaries, the bathymetry ranges from -4 m to 25 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 25 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 105 m.

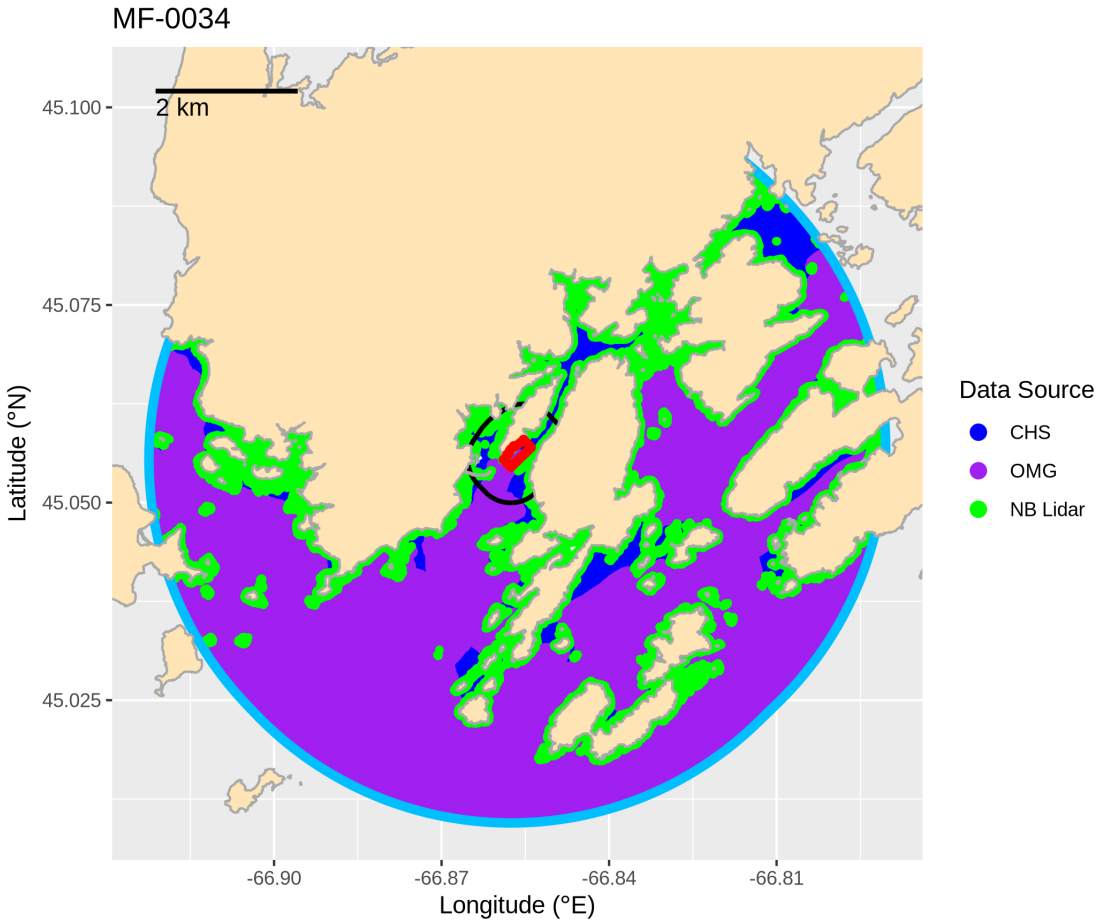


Figure 6.19.1. Farm MF-0034 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

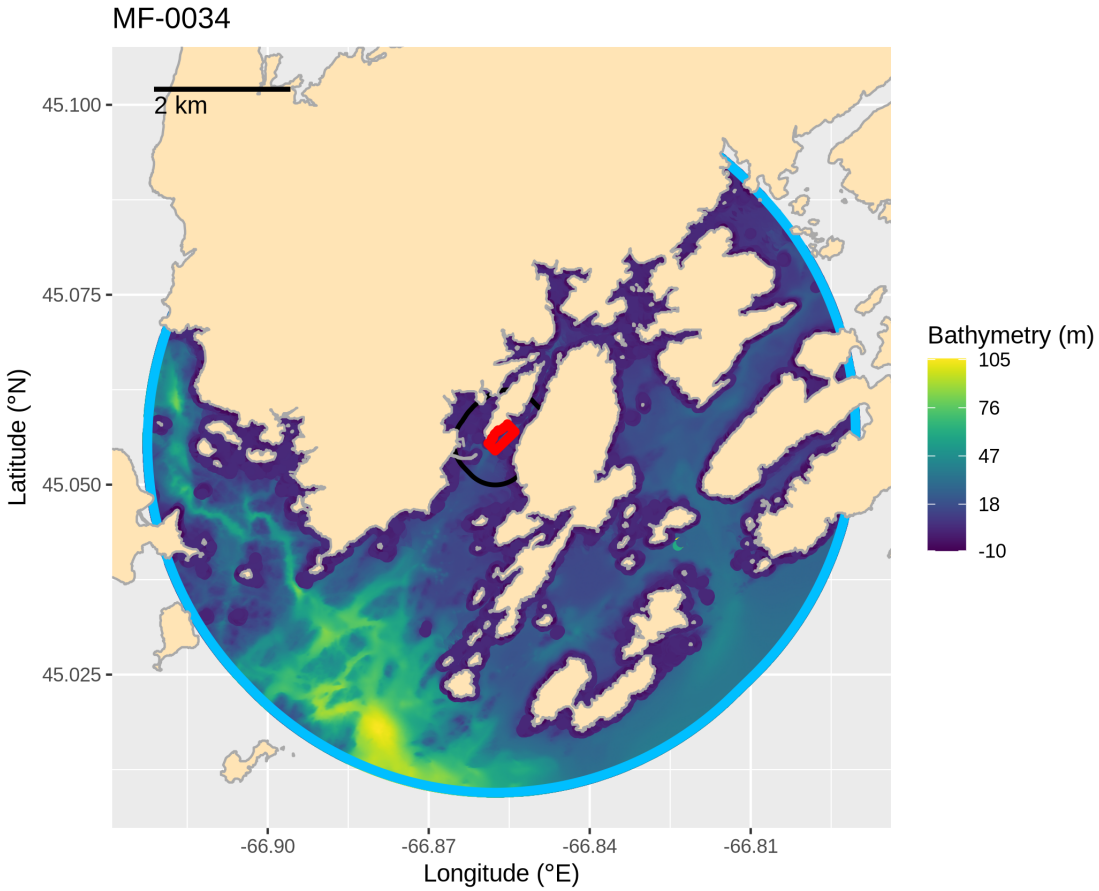


Figure 6.19.2. Farm MF-0034 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.20 Farm MF-0035

The lease centre for farm MF-0035 is 66.8563° W, 45.0523° N and the lease encompasses an area of 142802 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.20.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.20.2. Within the lease boundaries, the bathymetry ranges from -3 m to 17 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 25 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 132 m.

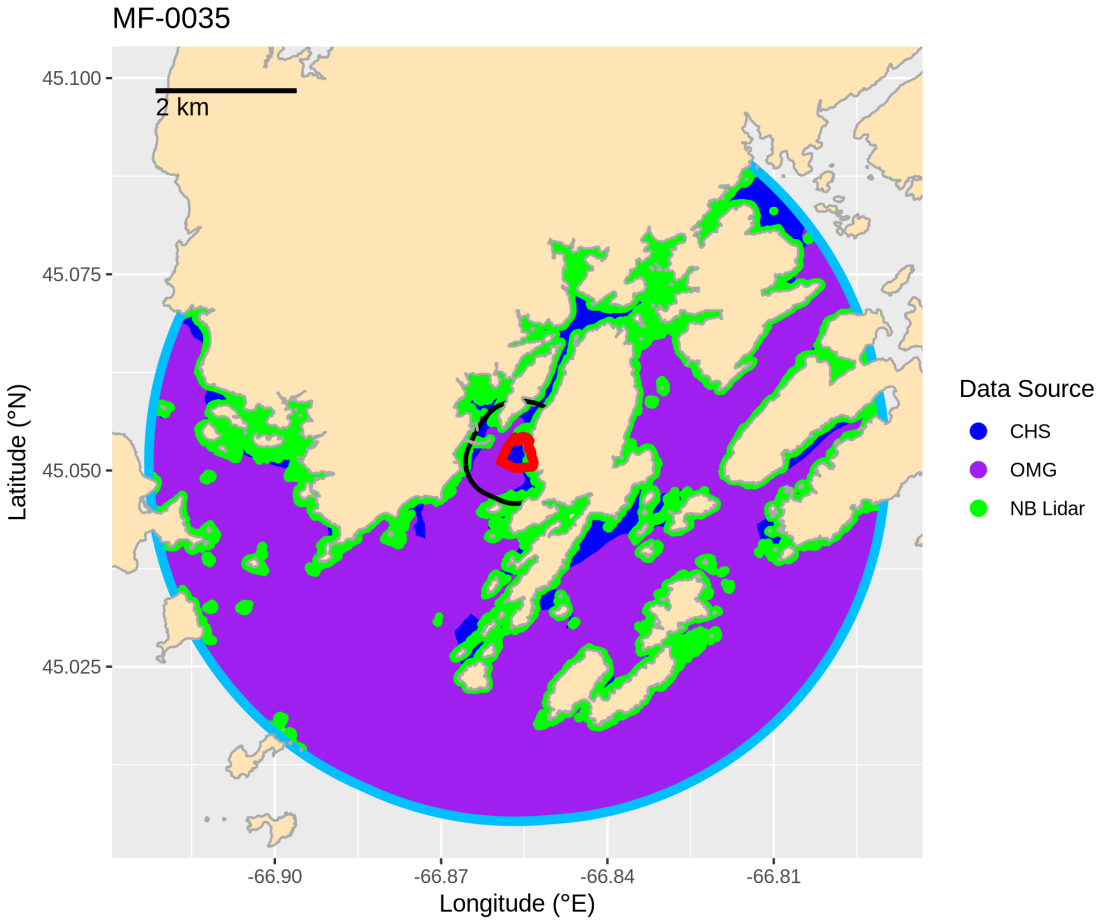


Figure 6.20.1. Farm MF-0035 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

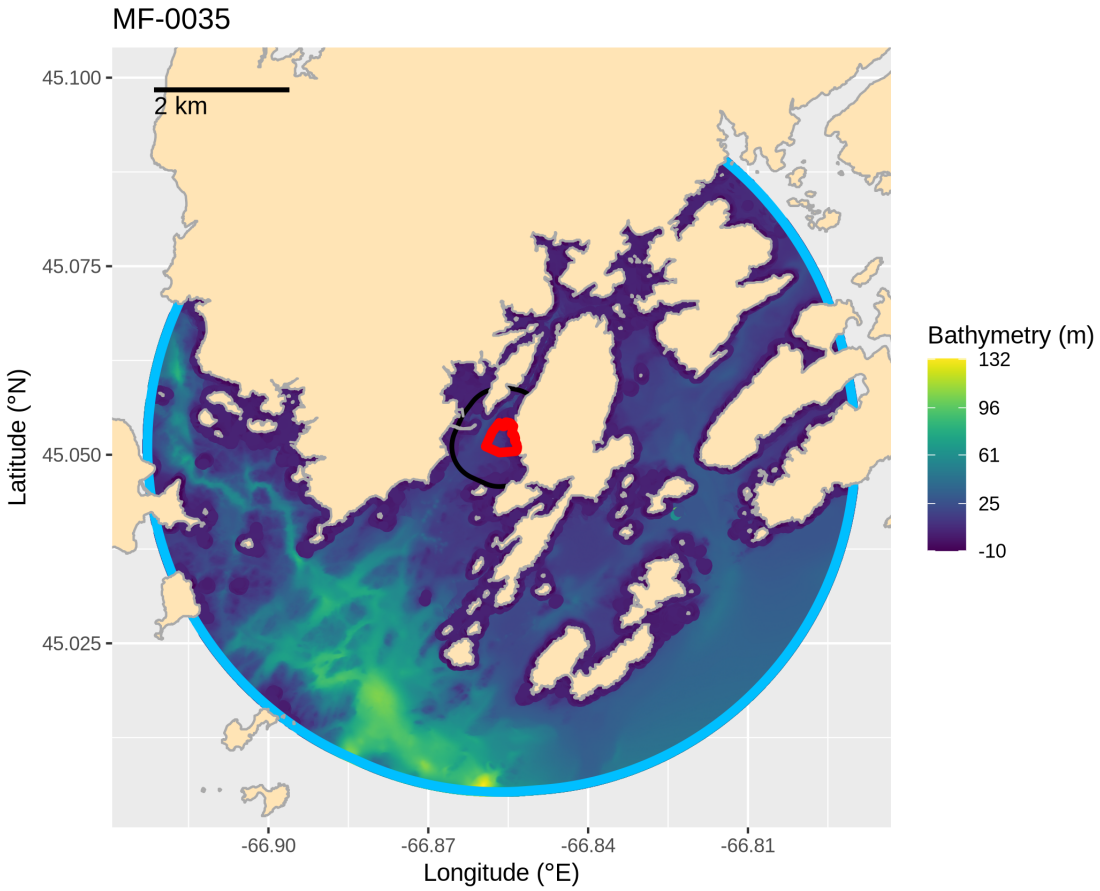


Figure 6.20.2. Farm MF-0035 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.21 Farm MF-0036

The lease centre for farm MF-0036 is 66.8586° W, 45.0485° N and the lease encompasses an area of 107239 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.21.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.21.2. Within the lease boundaries, the bathymetry ranges from 4 m to 16 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 26 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 135 m.

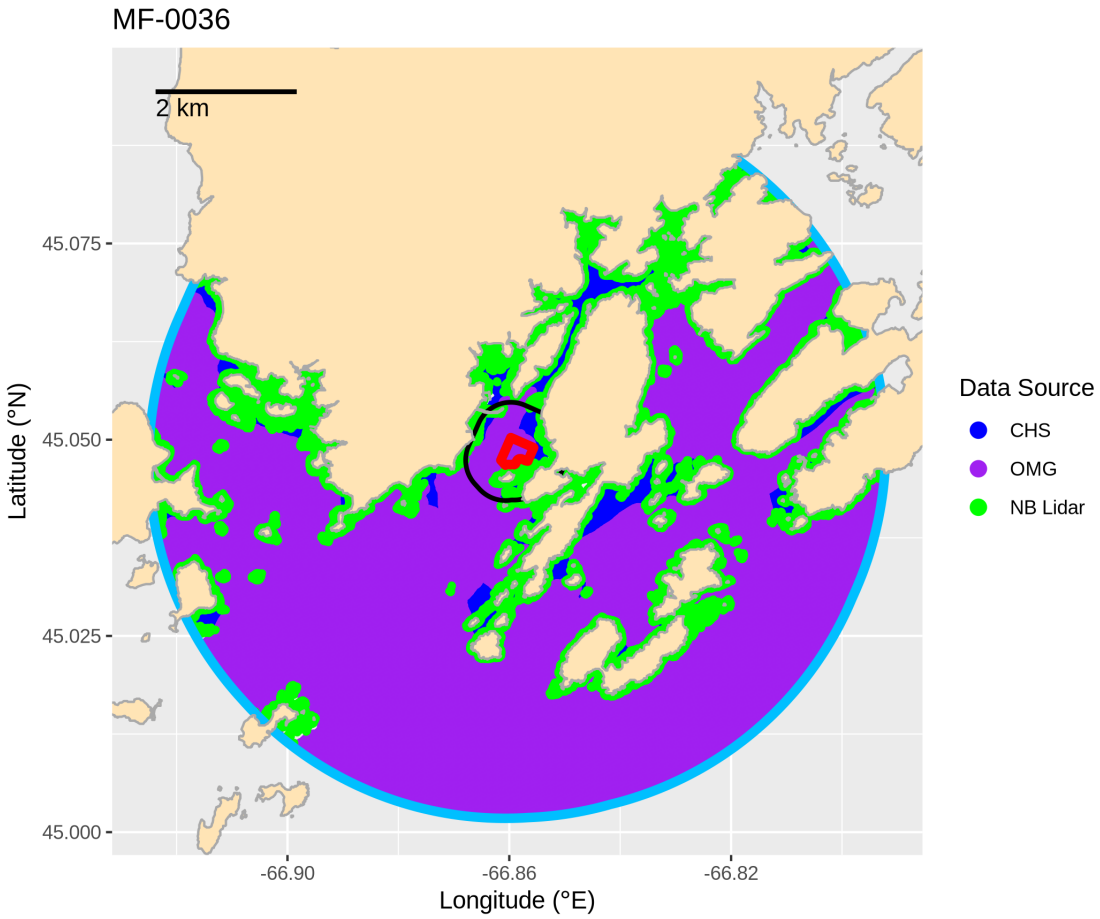


Figure 6.21.1. Farm MF-0036 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

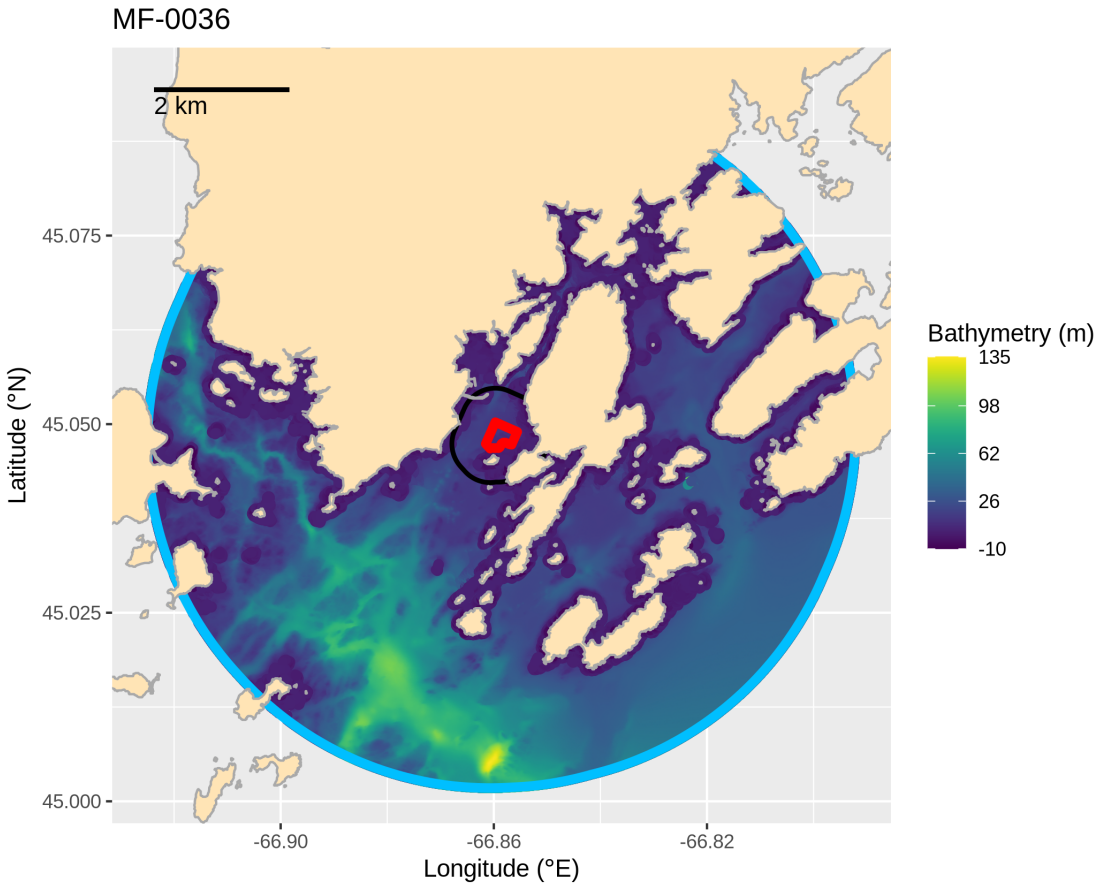


Figure 6.21.2. Farm MF-0036 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.22 Farm MF-0037

The lease centre for farm MF-0037 is 66.8744° W, 45.0440° N and the lease encompasses an area of 253668 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.22.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.22.2. Within the lease boundaries, the bathymetry ranges from -3 m to 31 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 53 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 146 m.

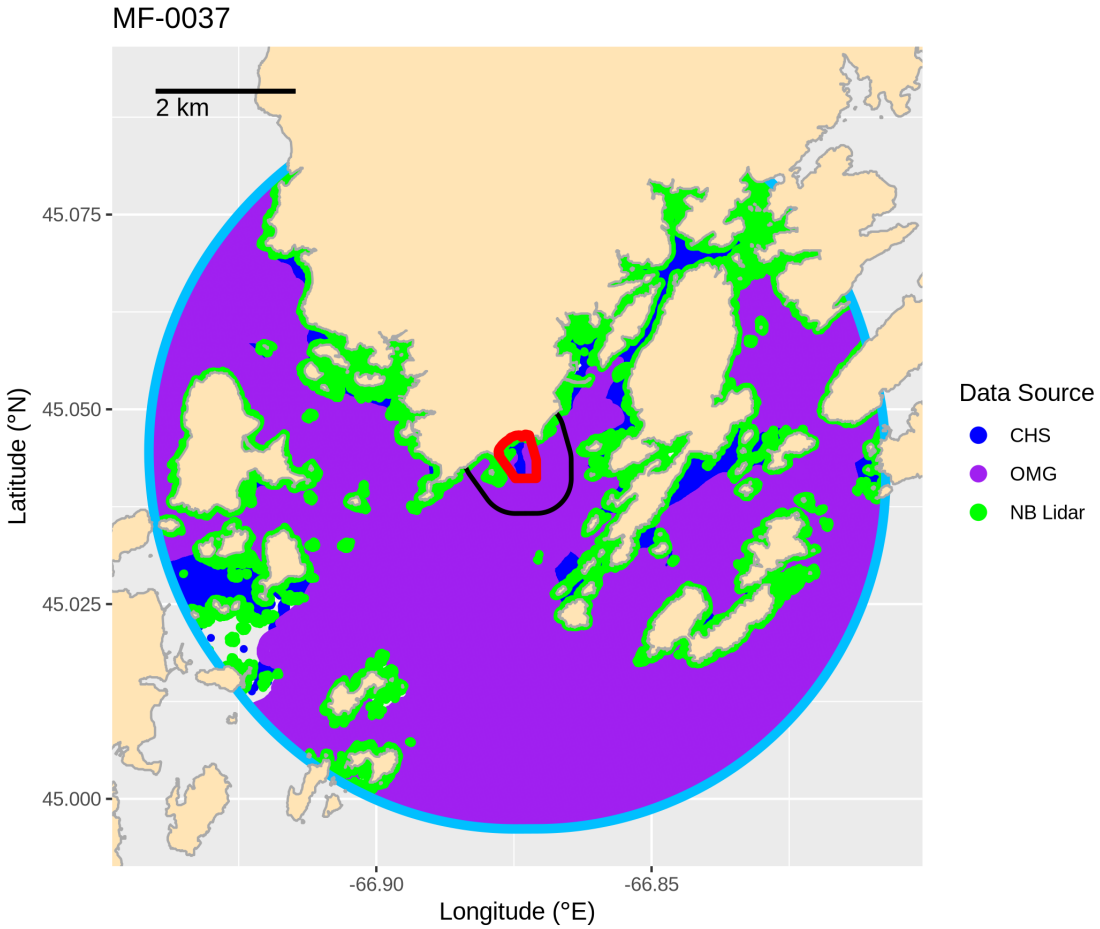


Figure 6.22.1. Farm MF-0037 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

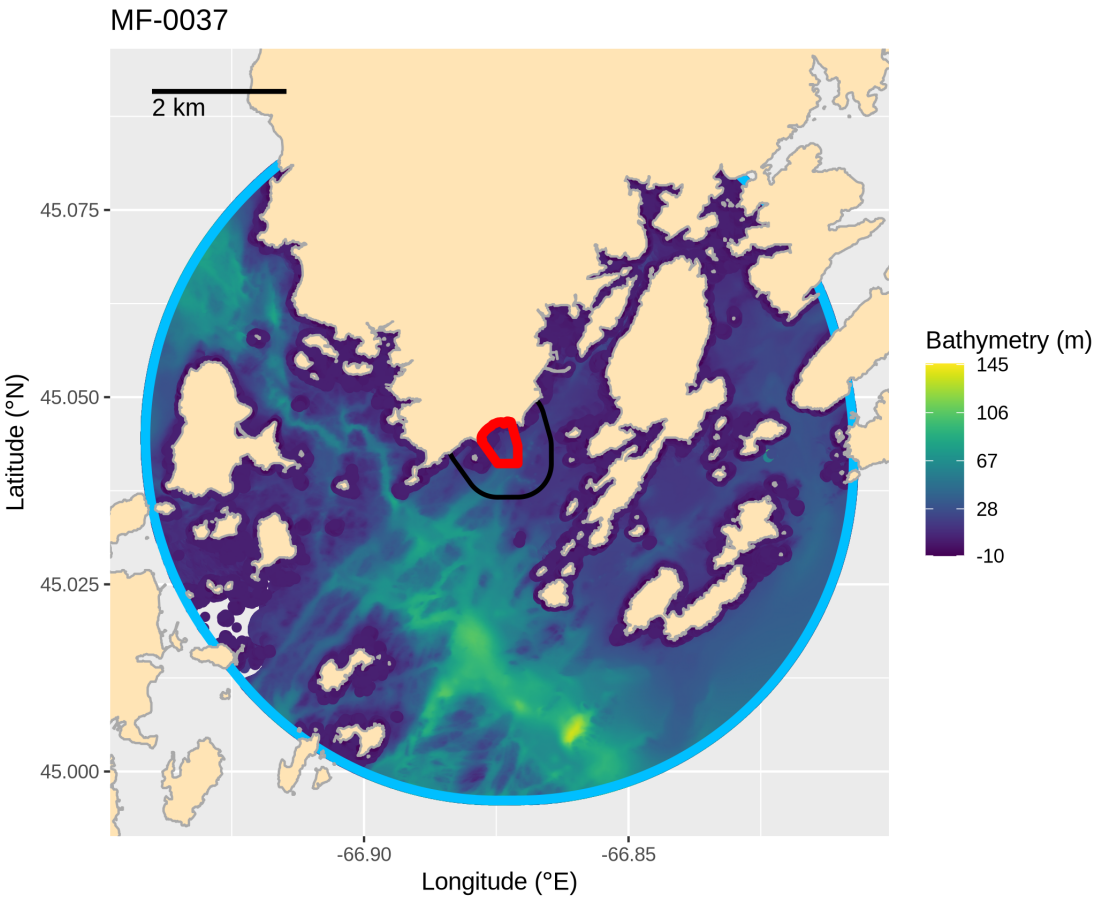


Figure 6.22.2. Farm MF-0037 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.23 Farm MF-0038

The lease centre for farm MF-0038 is 66.8910° W, 45.0424° N and the lease encompasses an area of 123681 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.23.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.23.2. Within the lease boundaries, the bathymetry ranges from -3 m to 24 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 65 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 146 m.

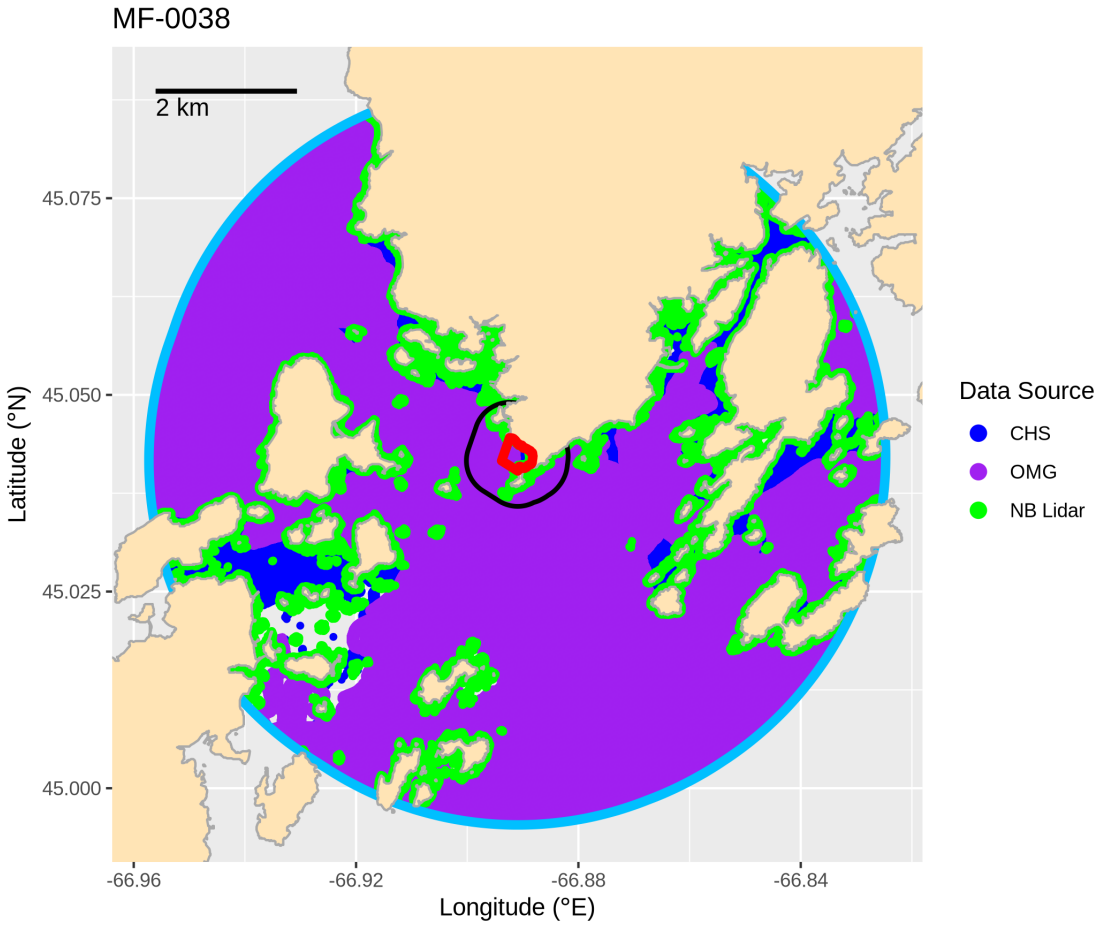


Figure 6.23.1. Farm MF-0038 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

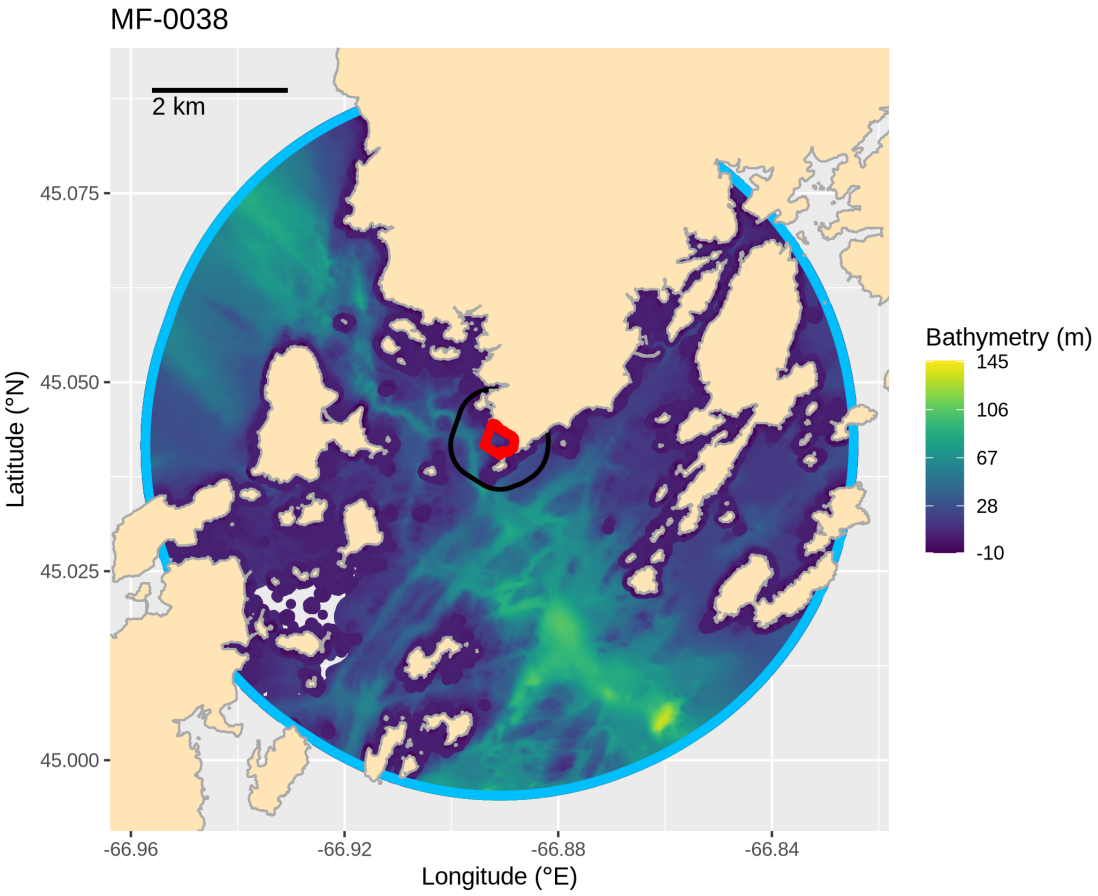


Figure 6.23.2. Farm MF-0038 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.24 Farm MF-0039

The lease centre for farm MF-0039 is 66.9100° W, 45.0599° N and the lease encompasses an area of 185077 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.24.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.24.2. Within the lease boundaries, the bathymetry ranges from -5 m to 33 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 82 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 146 m.

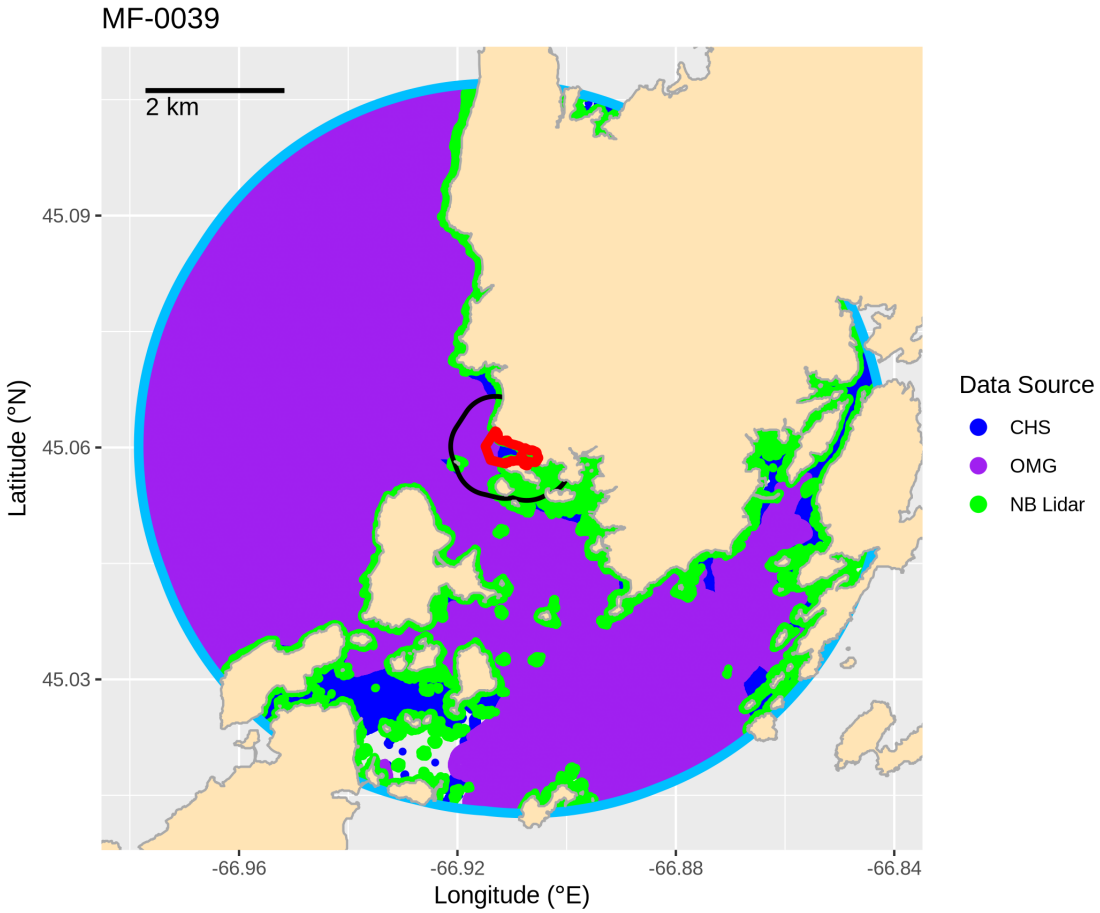


Figure 6.24.1. Farm MF-0039 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

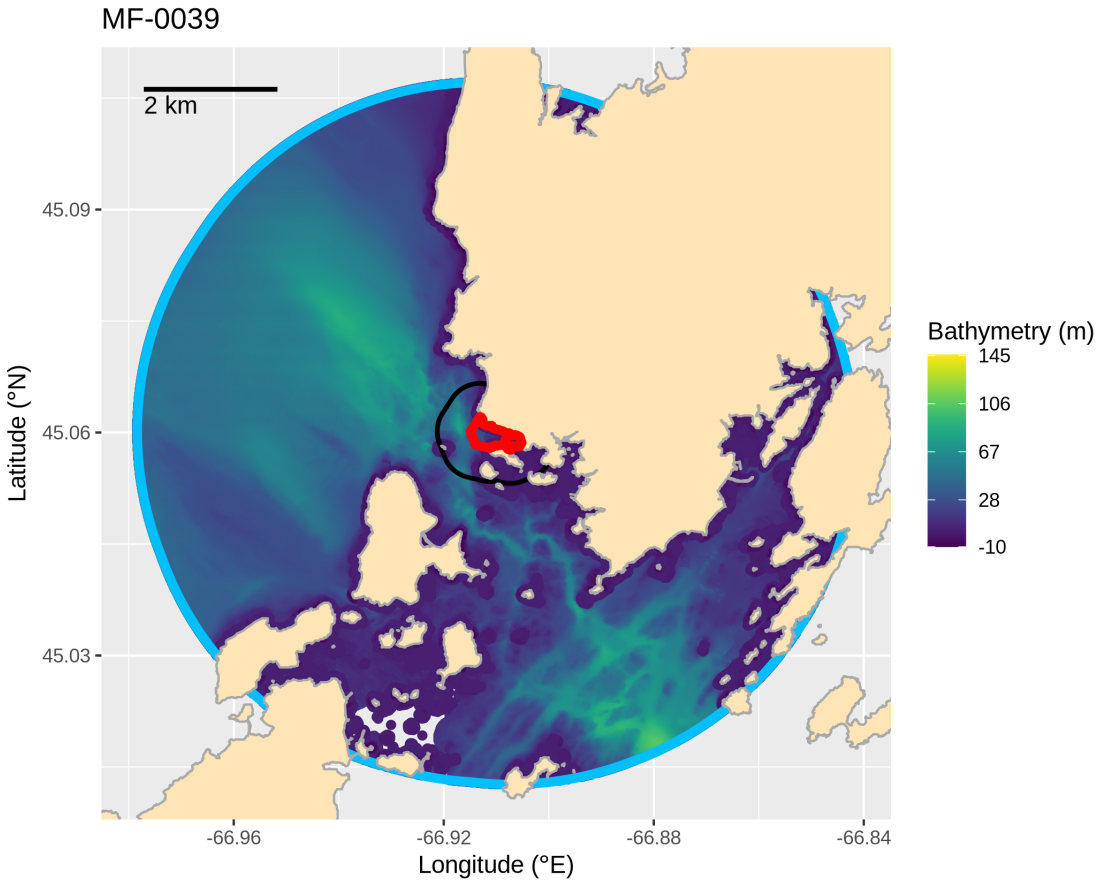


Figure 6.24.2. Farm MF-0039 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.25 Farm MF-0040

The lease centre for farm MF-0040 is 66.9144° W, 45.0679° N and the lease encompasses an area of 91605 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.25.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.25.2. Within the lease boundaries, the bathymetry ranges from -3 m to 32 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 69 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 146 m.

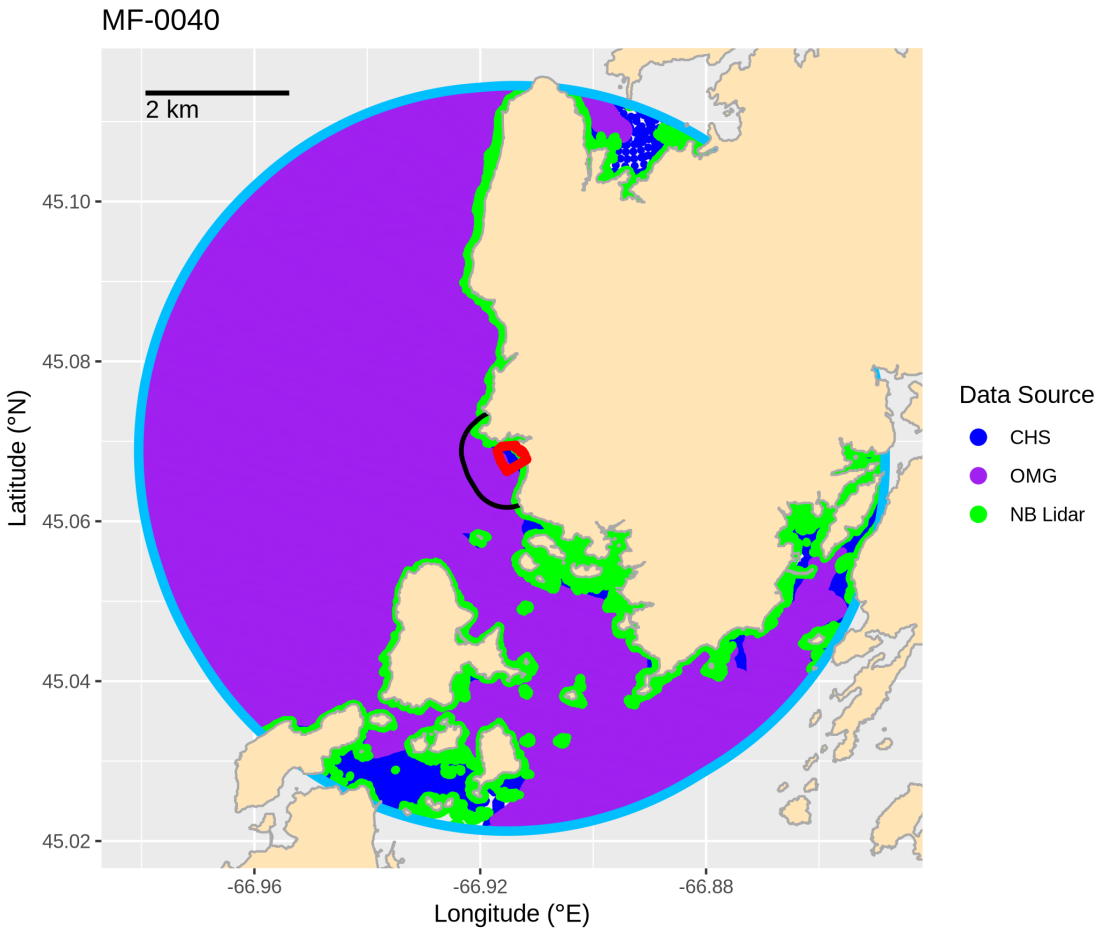


Figure 6.25.1. Farm MF-0040 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

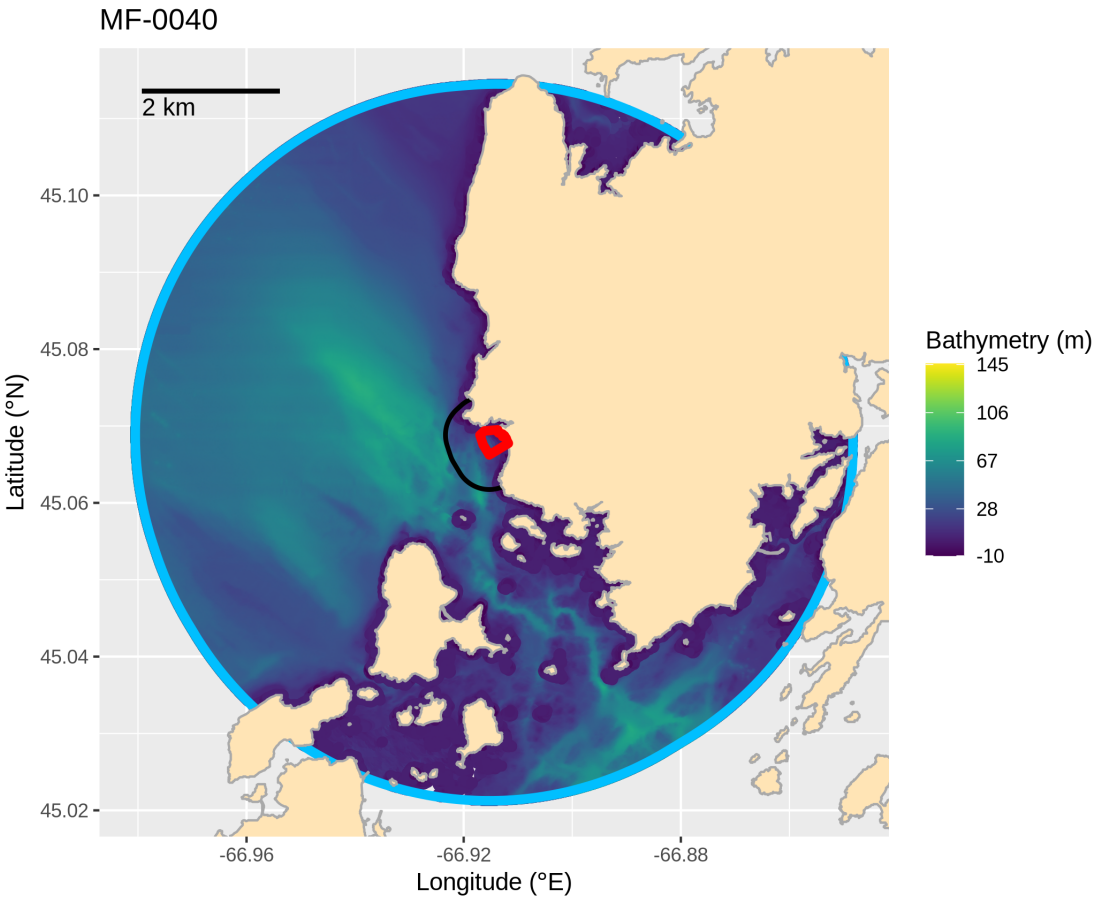


Figure 6.25.2. Farm MF-0040 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.26 Farm MF-0042

The lease centre for farm MF-0042 is 66.9422° W, 45.0272° N and the lease encompasses an area of 94203 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.26.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.26.2. Within the lease boundaries, the bathymetry ranges from -4 m to 14 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 17 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 105 m.

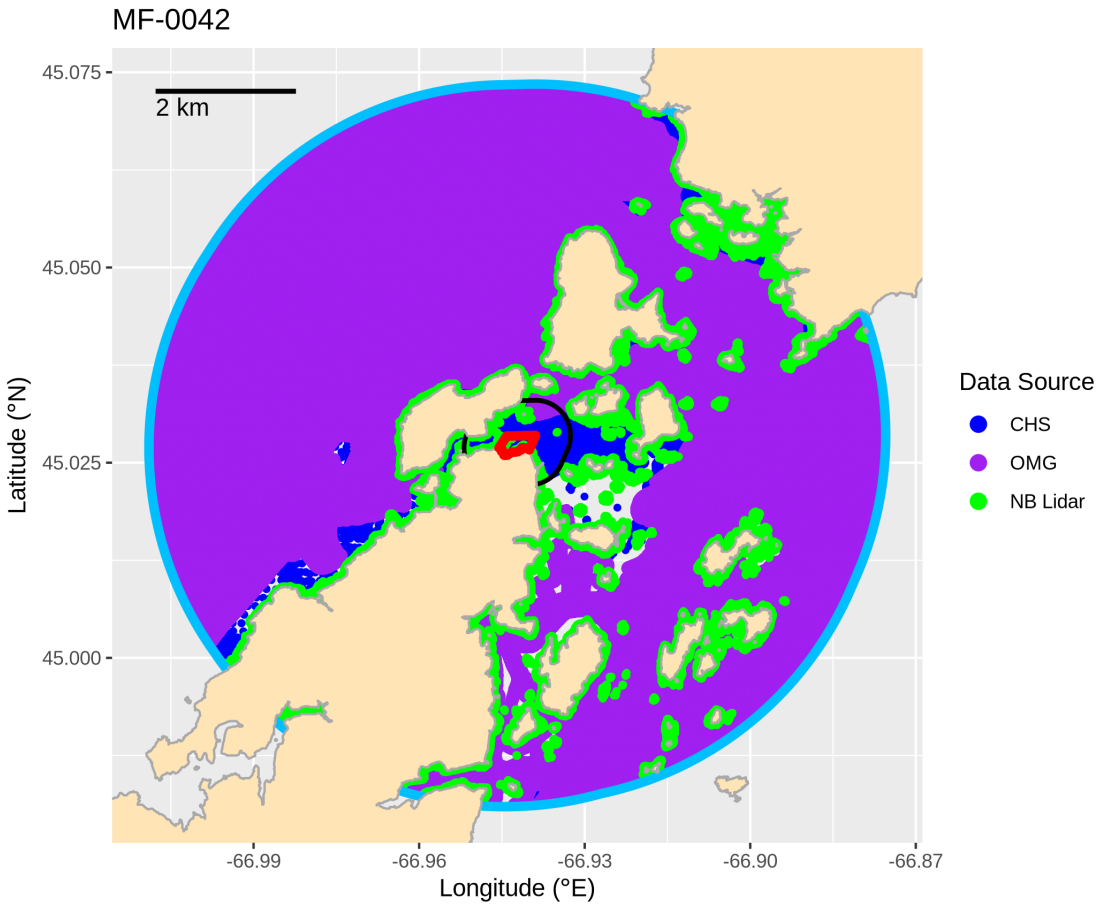


Figure 6.26.1. Farm MF-0042 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

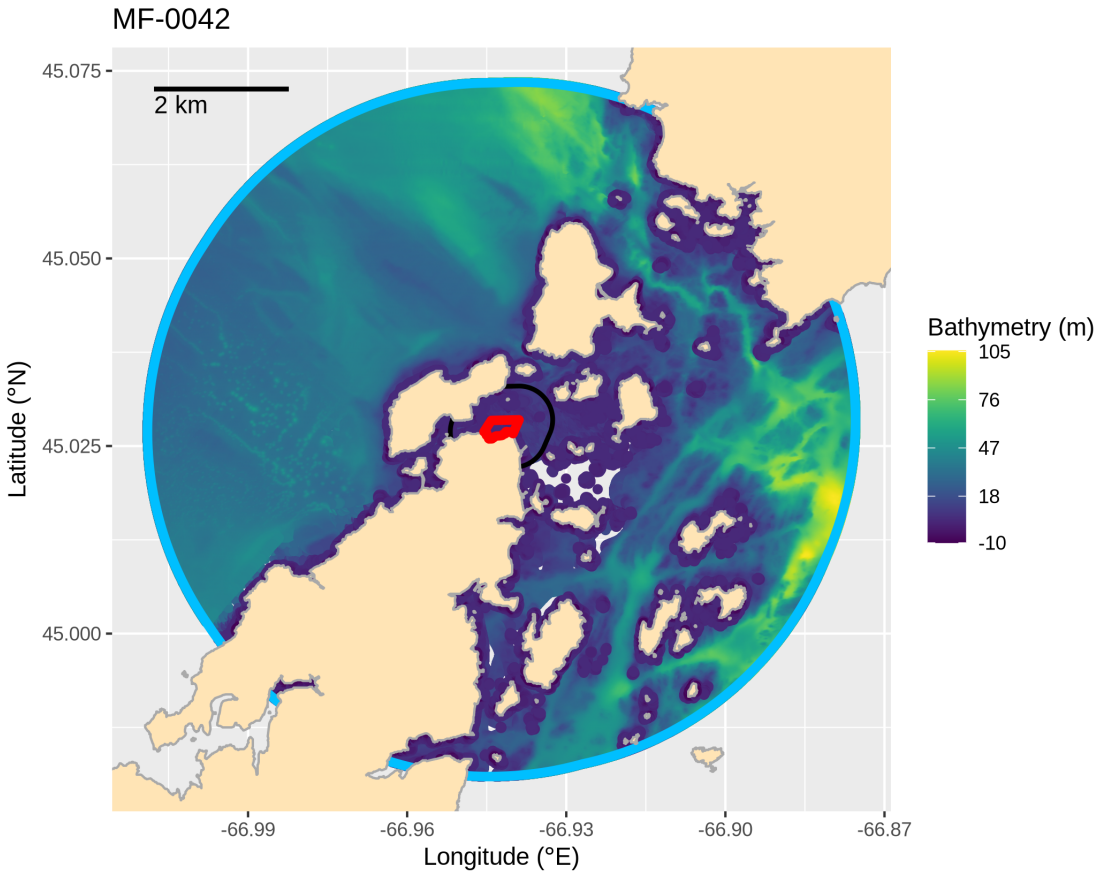


Figure 6.26.2. Farm MF-0042 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.27 Farm MF-0044

The lease centre for farm MF-0044 is 66.9110° W, 44.9994° N and the lease encompasses an area of 101450 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.27.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.27.2. Within the lease boundaries, the bathymetry ranges from -3 m to 25 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 75 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 149 m.

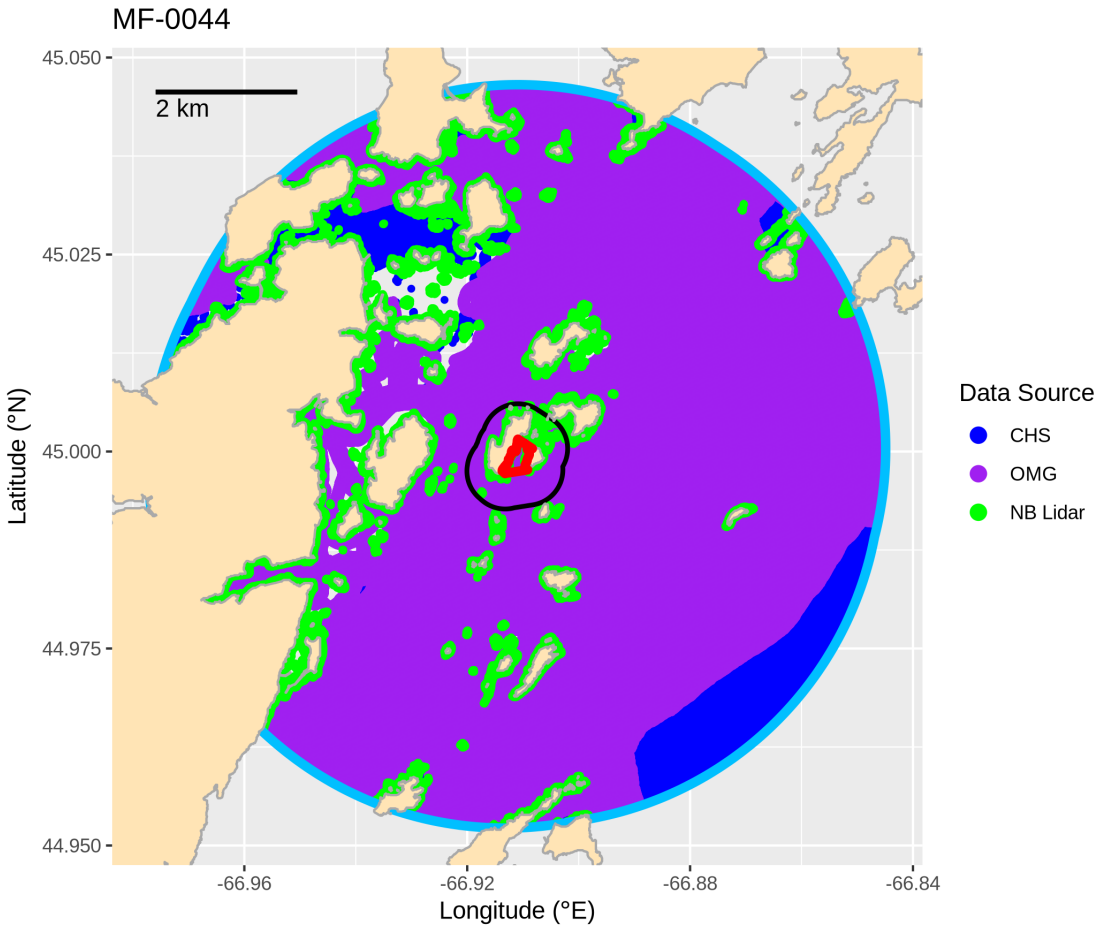


Figure 6.27.1. Farm MF-0044 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

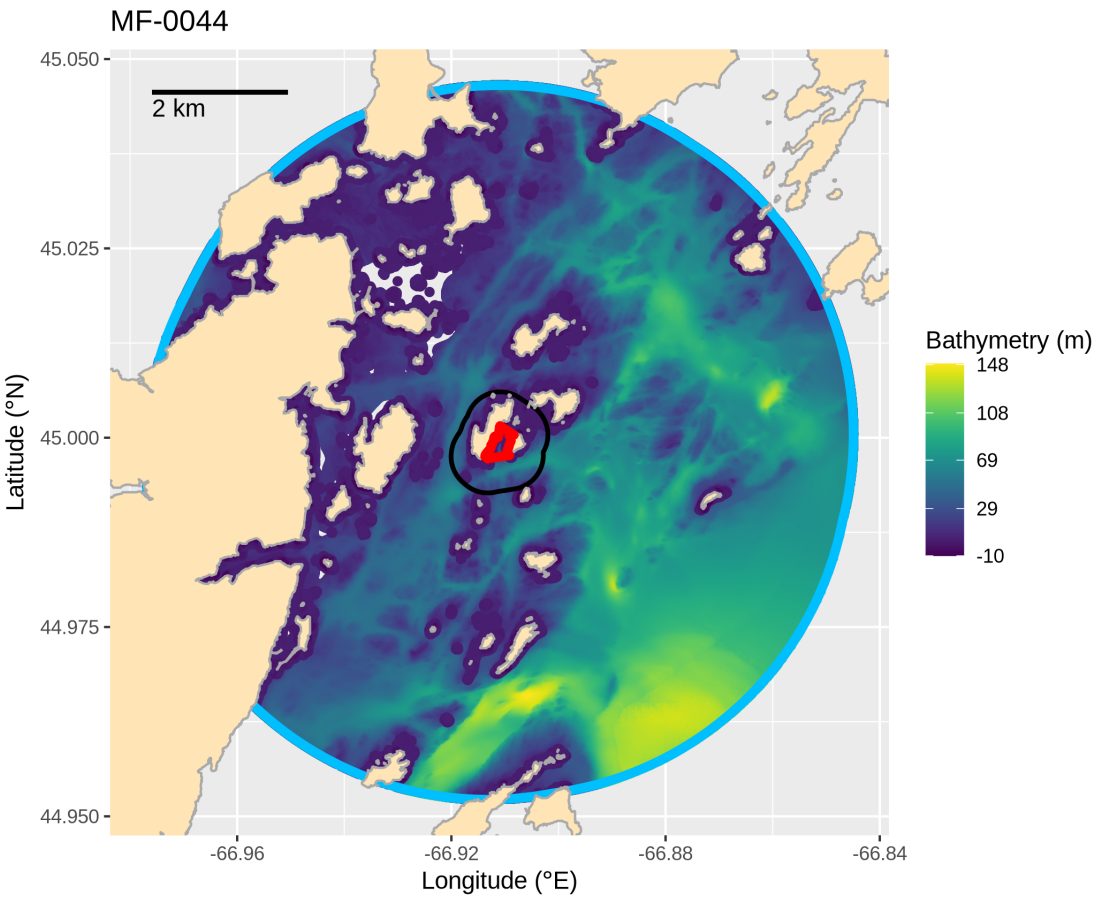


Figure 6.27.2. Farm MF-0044 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.28 Farm MF-0045

The lease centre for farm MF-0045 is 66.9277° W, 45.0040° N and the lease encompasses an area of 158839 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.28.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.28.2. Within the lease boundaries, the bathymetry ranges from -7 m to 32 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 53 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 149 m.

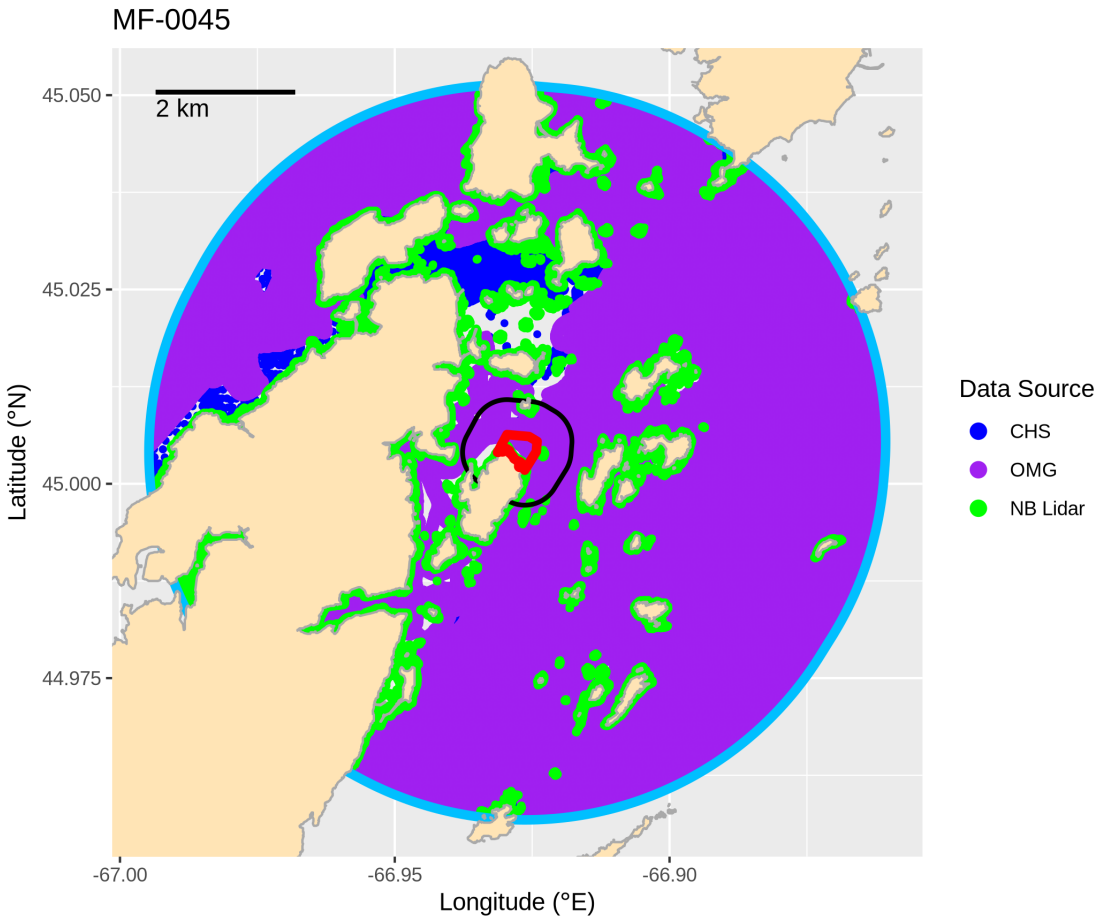


Figure 6.28.1. Farm MF-0045 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

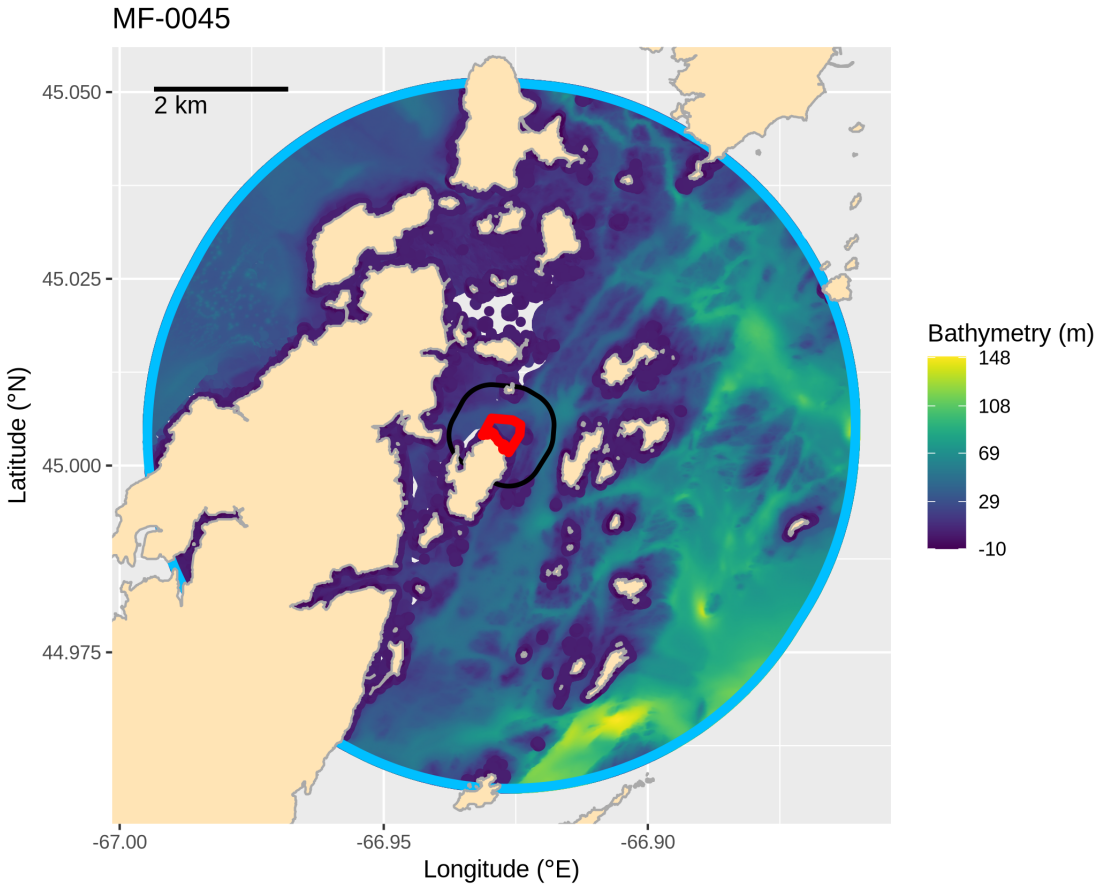


Figure 6.28.2. Farm MF-0045 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.29 Farm MF-0046

The lease centre for farm MF-0046 is 66.9453° W, 45.0001° N and the lease encompasses an area of 128589 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.29.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.29.2. Within the lease boundaries, the bathymetry ranges from -3 m to 23 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 24 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 149 m.

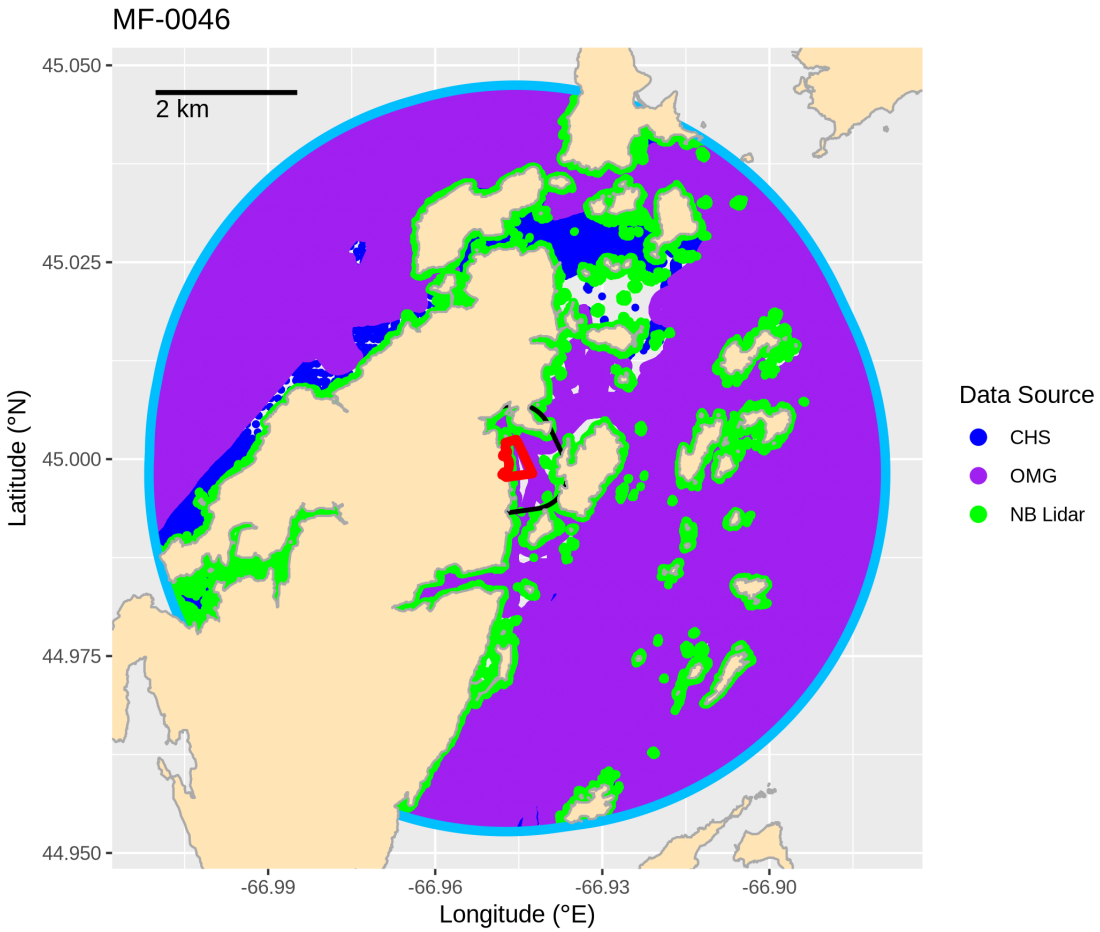


Figure 6.29.1. Farm MF-0046 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

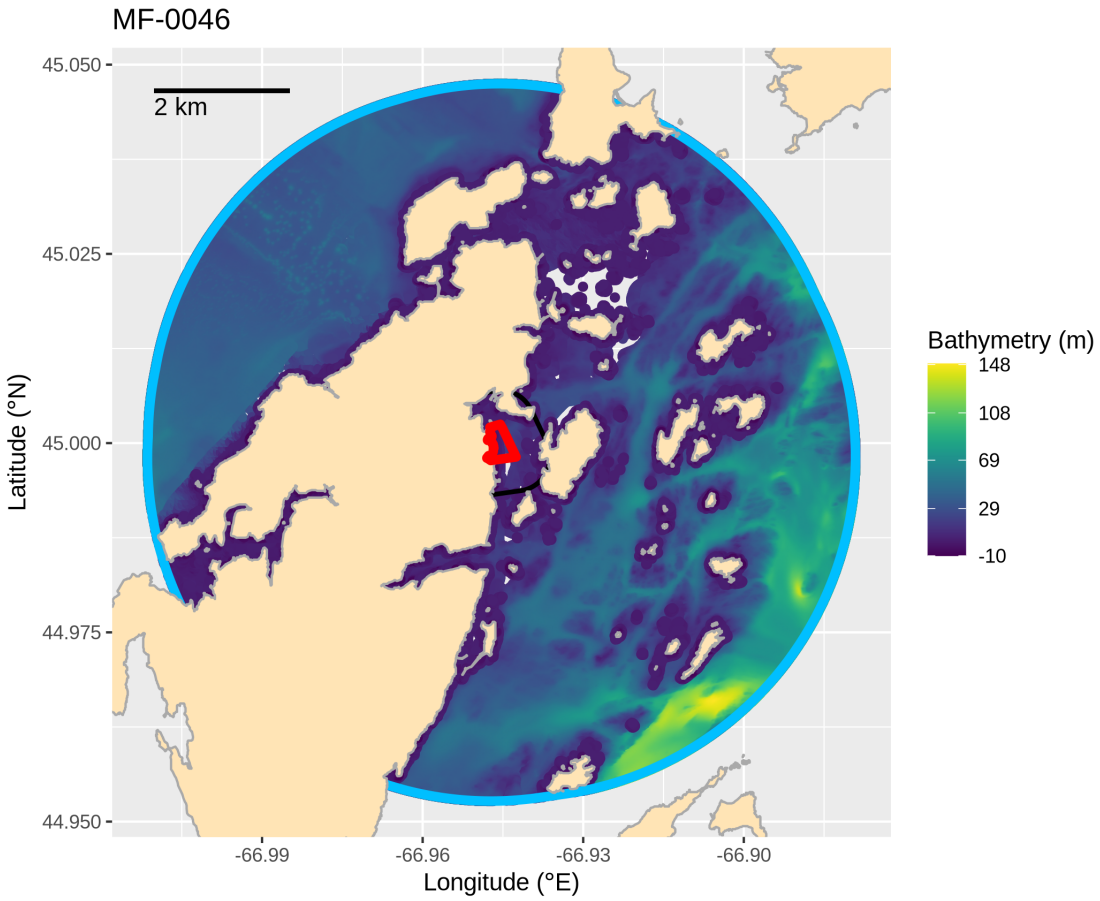


Figure 6.29.2. Farm MF-0046 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.30 Farm MF-0049

The lease centre for farm MF-0049 is 66.9702° W, 44.9343° N and the lease encompasses an area of 97713 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.30.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.30.2. Within the lease boundaries, the bathymetry ranges from -7 m to 24 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 65 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 123 m.

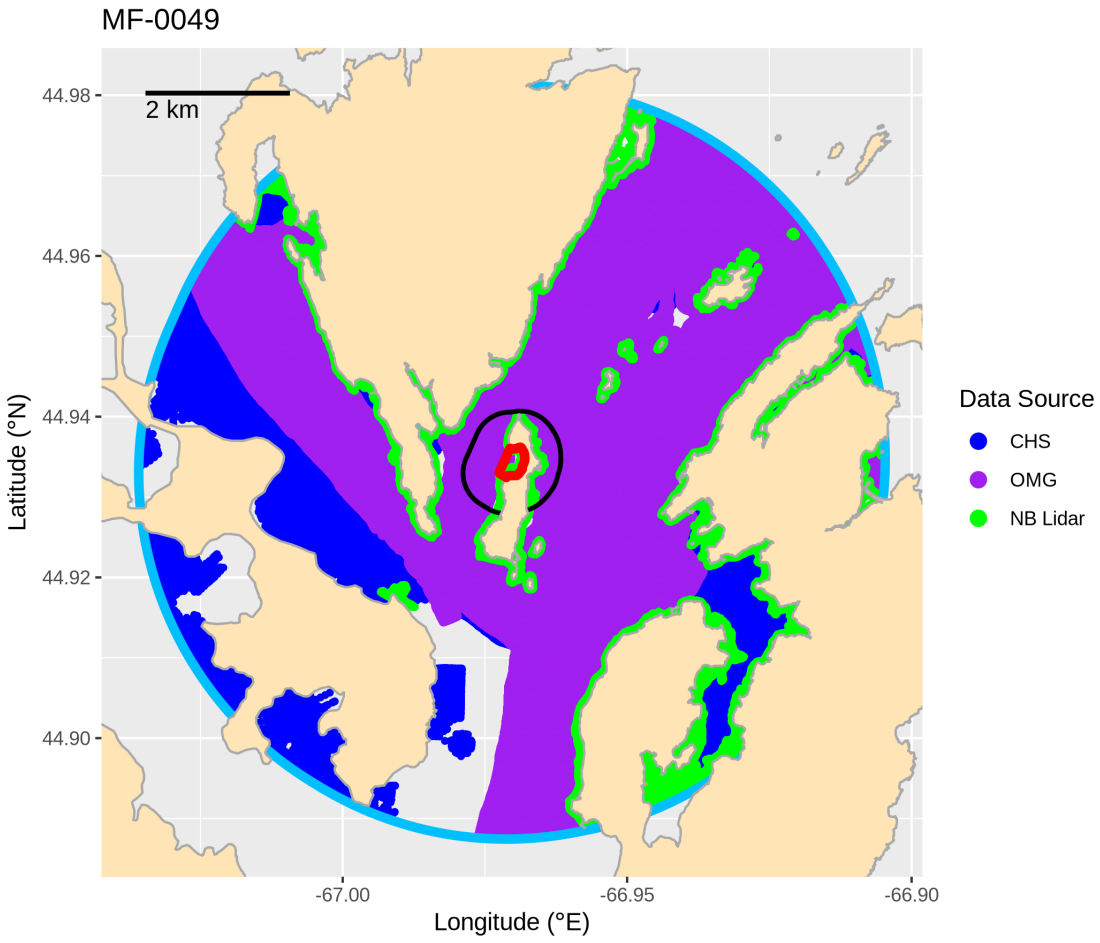


Figure 6.30.1. Farm MF-0049 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

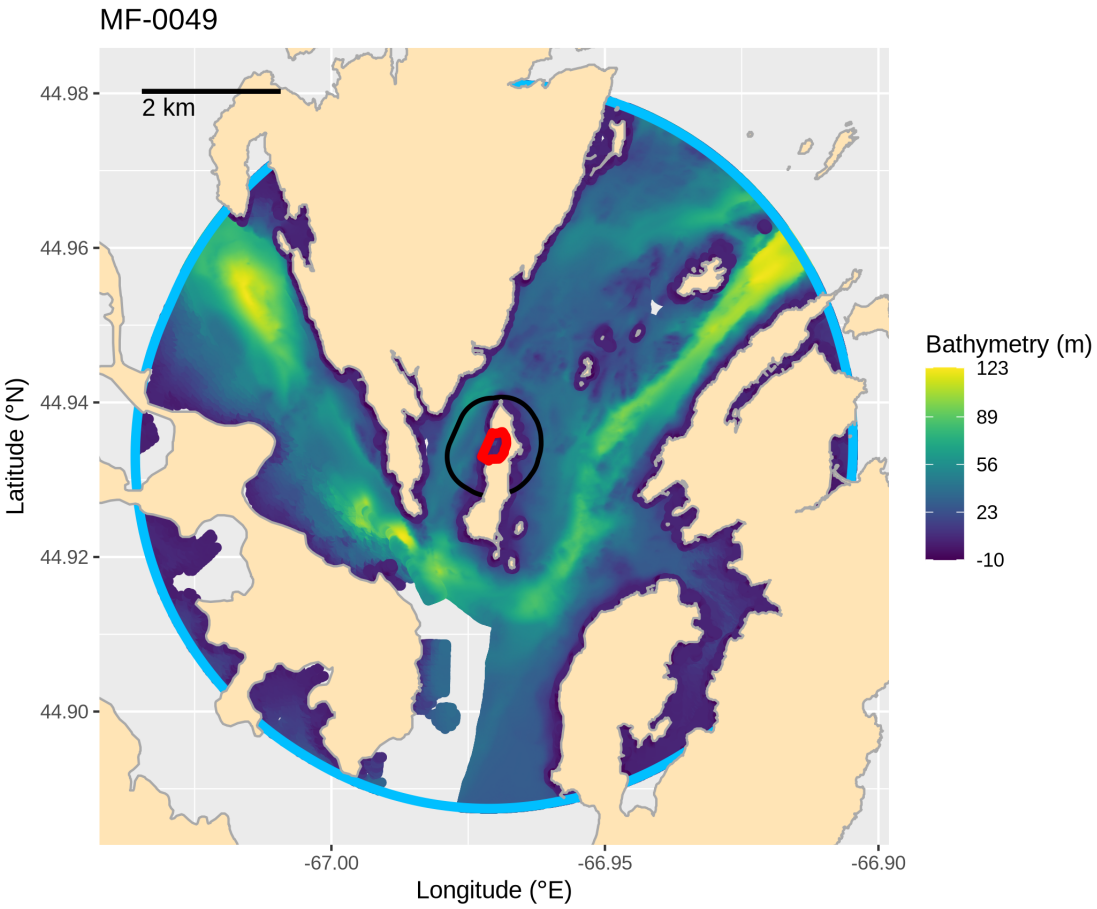


Figure 6.30.2. Farm MF-0049 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.31 Farm MF-0050

The lease centre for farm MF-0050 is 66.9742° W, 44.9288° N and the lease encompasses an area of 121707 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.31.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.31.2. Within the lease boundaries, the bathymetry ranges from -3 m to 35 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 52 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 122 m.

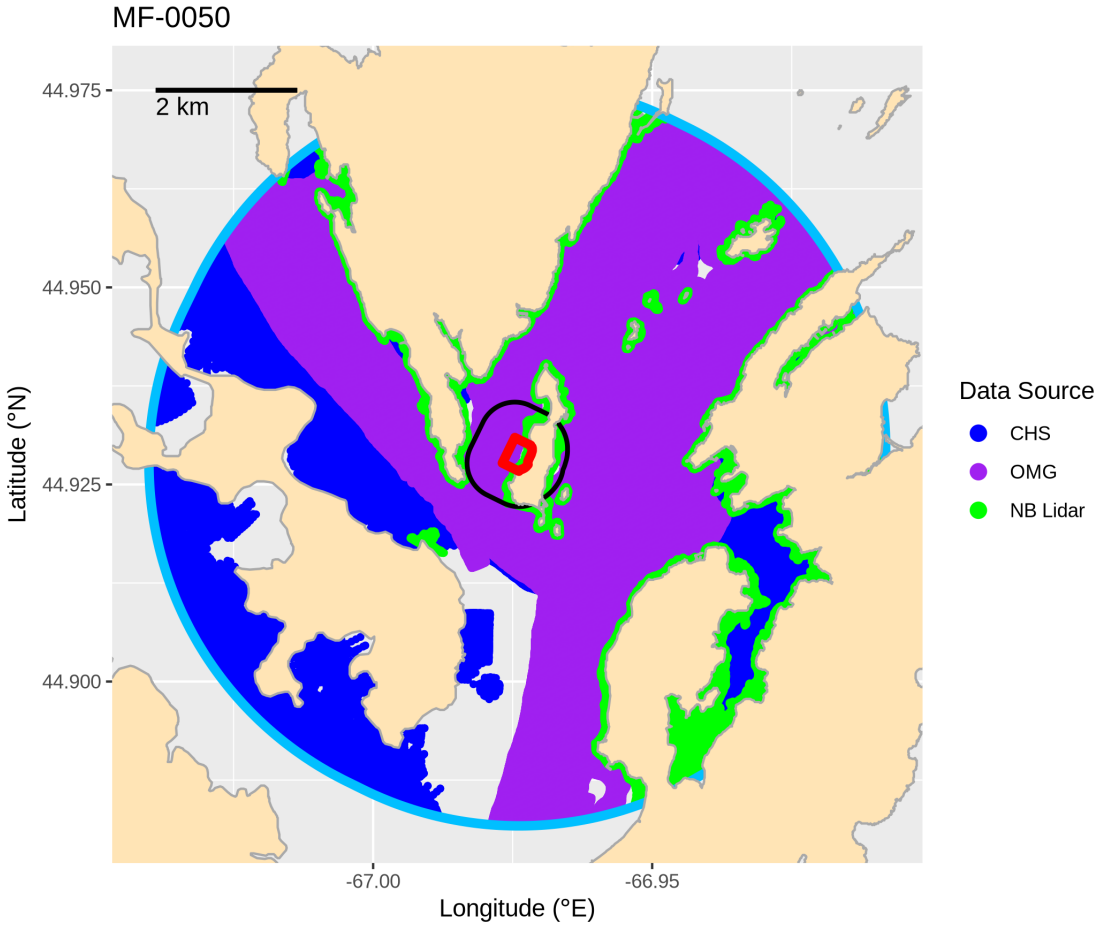


Figure 6.31.1. Farm MF-0050 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

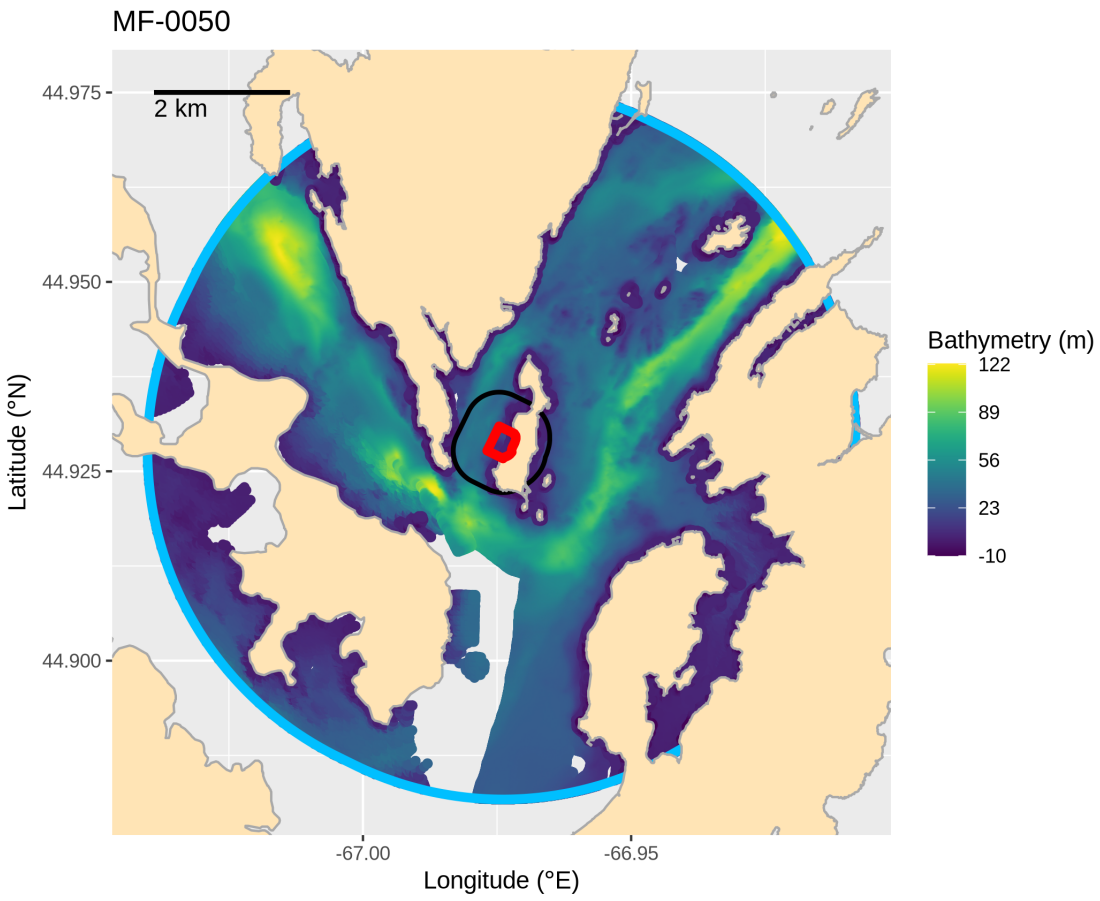


Figure 6.31.2. Farm MF-0050 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.32 Farm MF-0051

The lease centre for farm MF-0051 is 66.9820° W, 44.9350° N and the lease encompasses an area of 78529 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.32.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.32.2. Within the lease boundaries, the bathymetry ranges from 12 m to 37 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 60 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 121 m.

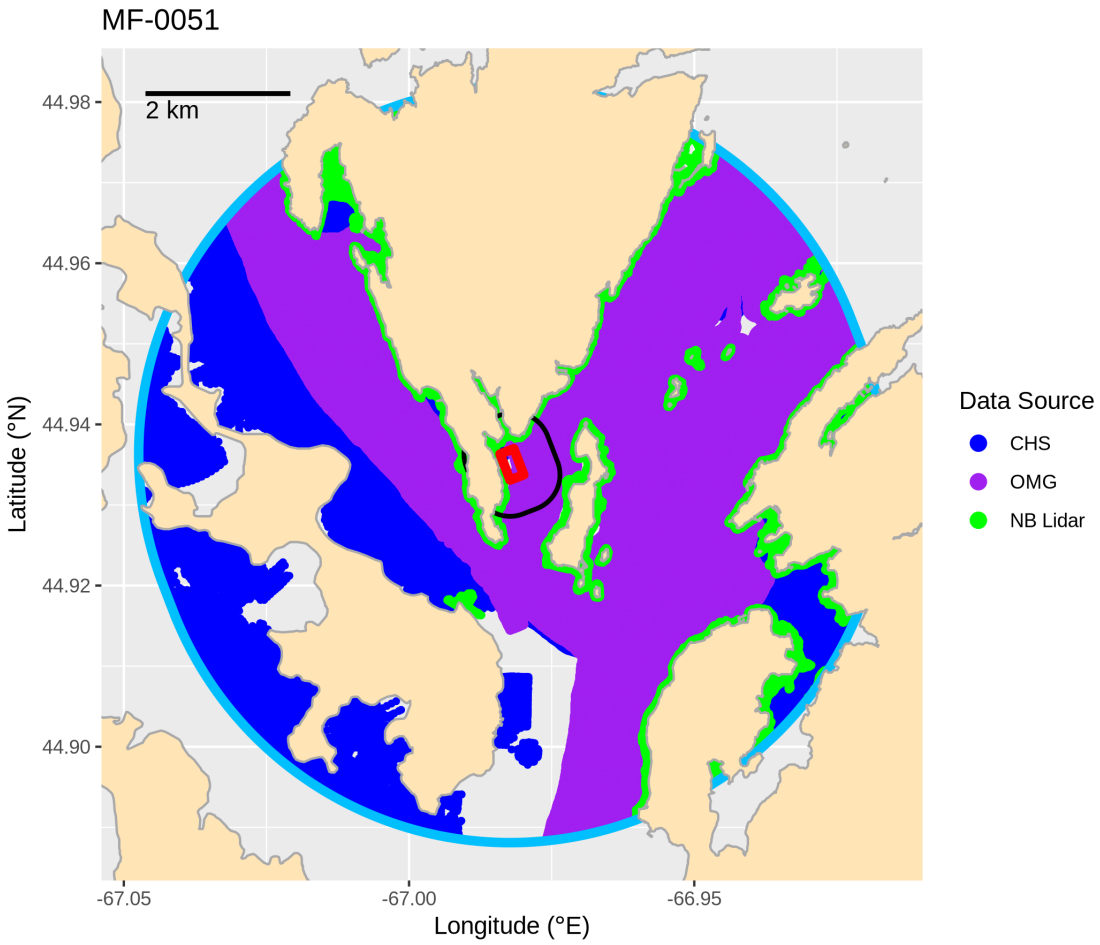


Figure 6.32.1. Farm MF-0051 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

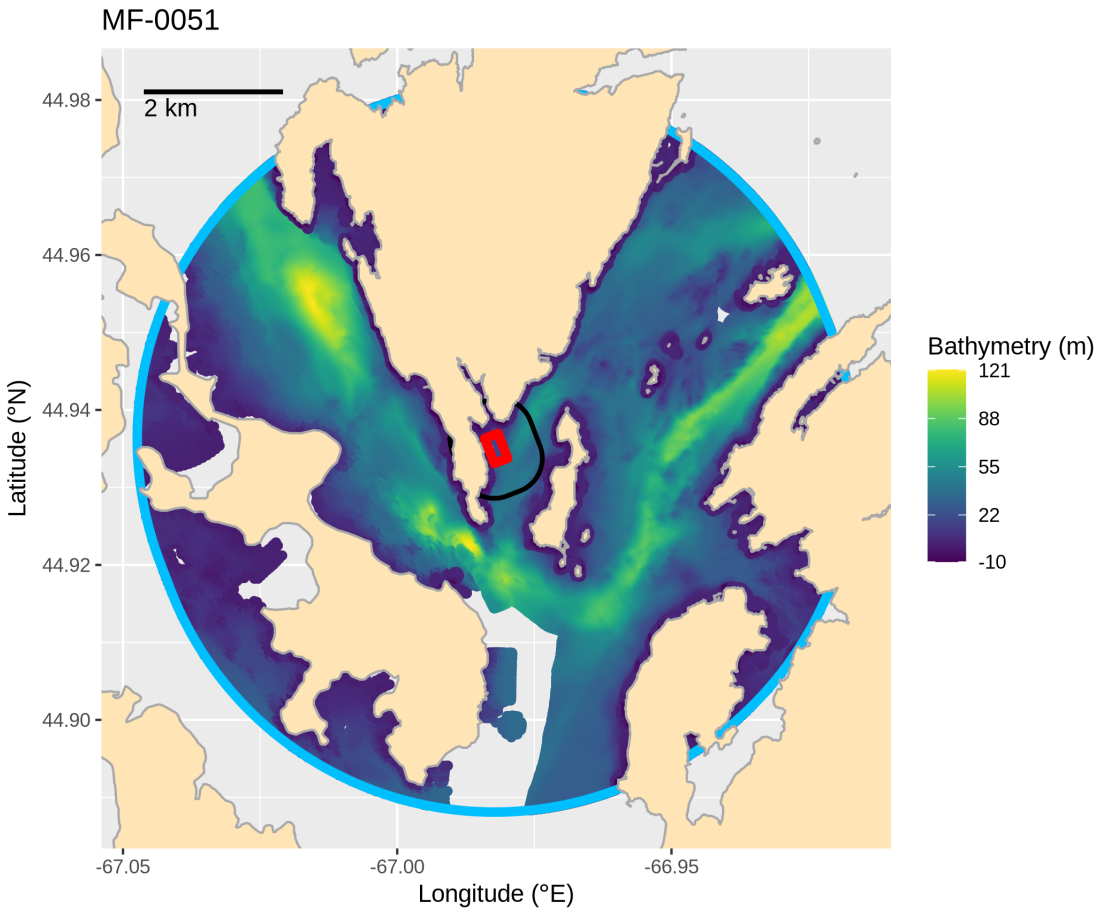


Figure 6.32.2. Farm MF-0051 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.33 Farm MF-0052

The lease centre for farm MF-0052 is 66.9366° W, 44.9243° N and the lease encompasses an area of 148260 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.33.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.33.2. Within the lease boundaries, the bathymetry ranges from -5 m to 25 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 51 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 149 m.

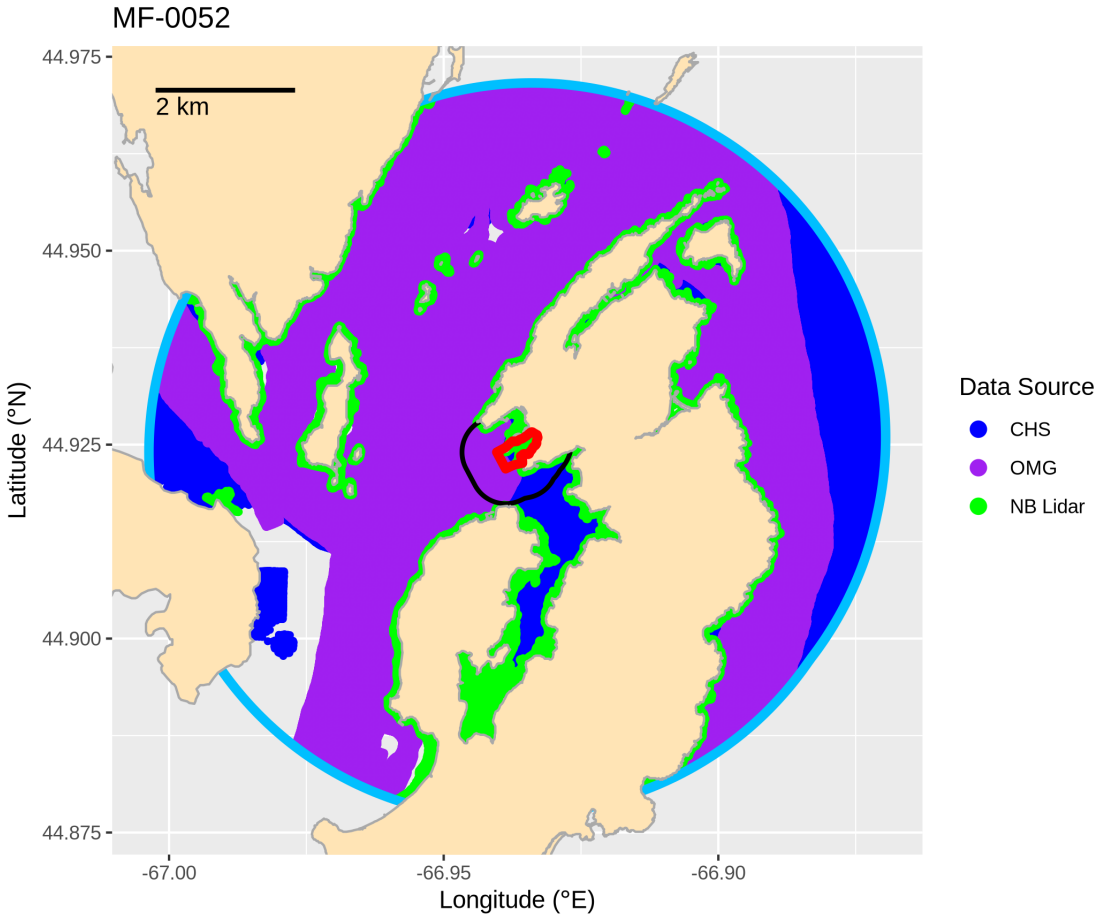


Figure 6.33.1. Farm MF-0052 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

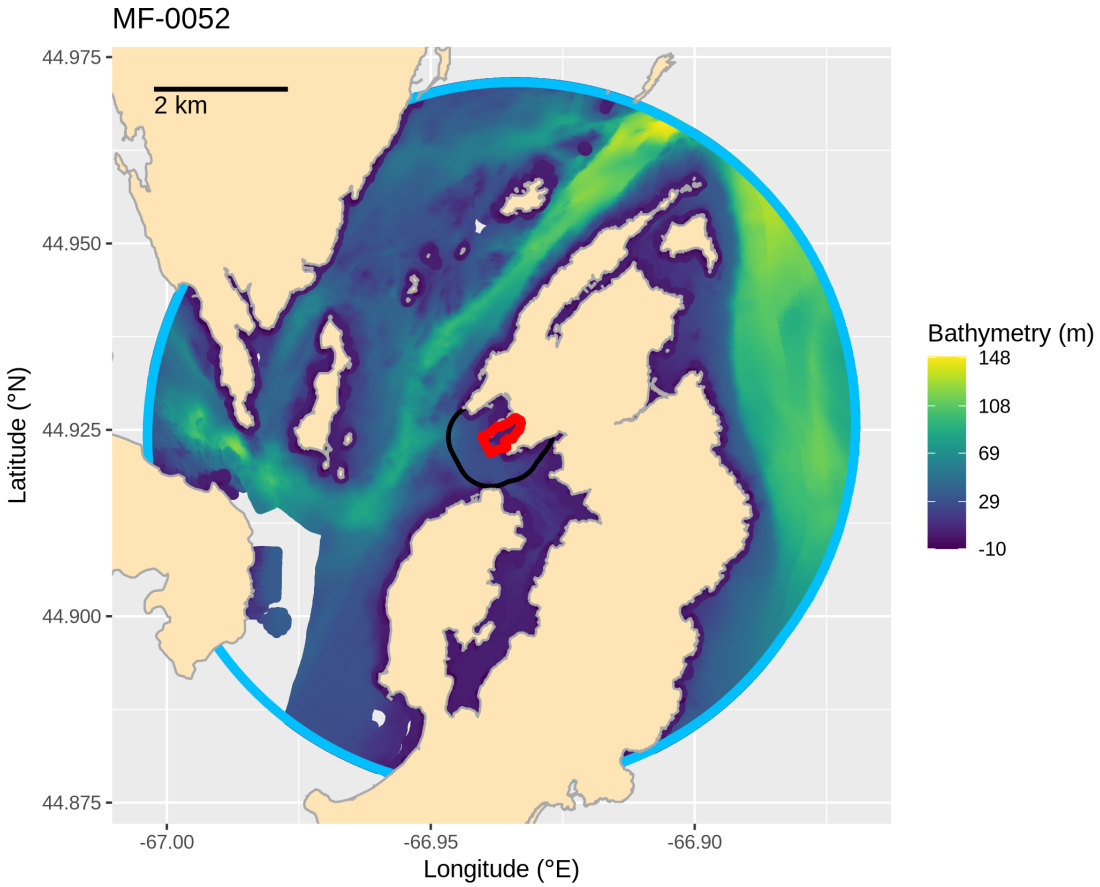


Figure 6.33.2. Farm MF-0052 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.34 Farm MF-0053

The lease centre for farm MF-0053 is 66.9322° W, 44.9209° N and the lease encompasses an area of 231071 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.34.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.34.2. Within the lease boundaries, the bathymetry ranges from -6 m to 26 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 32 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 147 m.

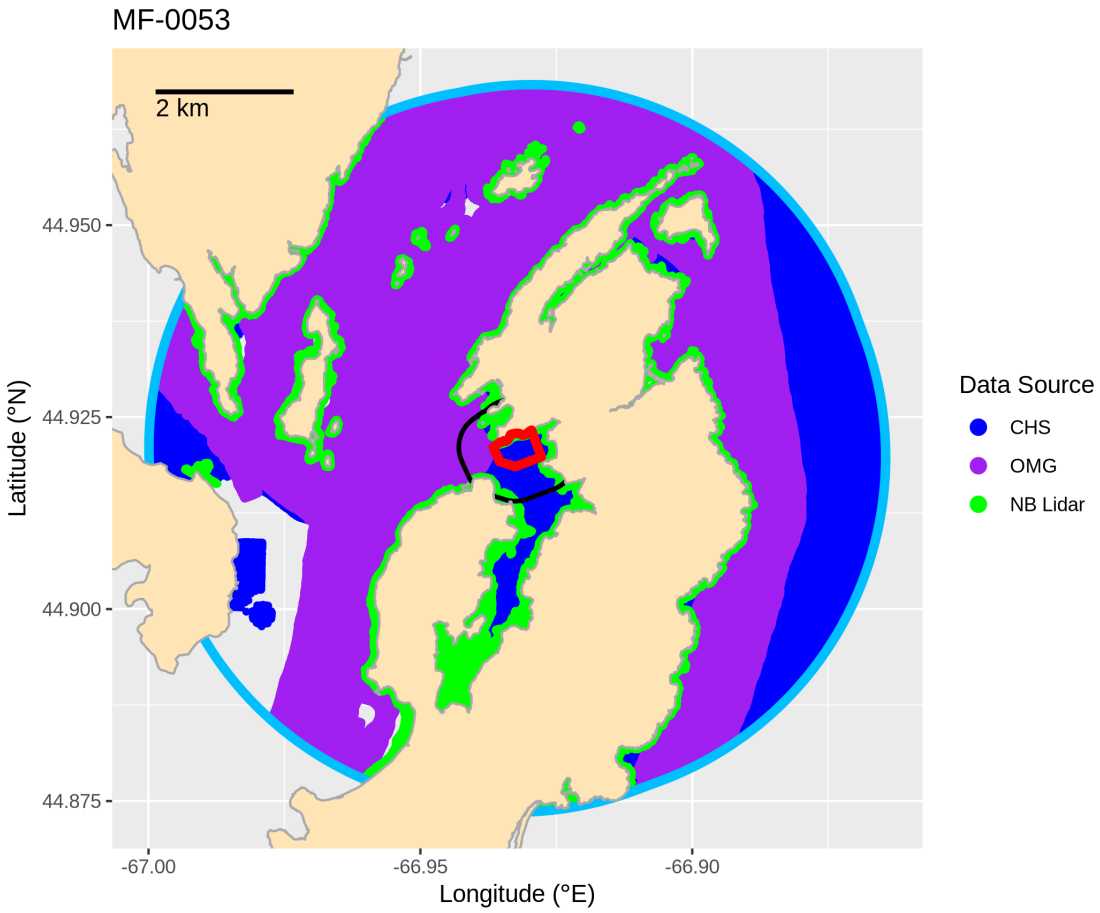


Figure 6.34.1. Farm MF-0053 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

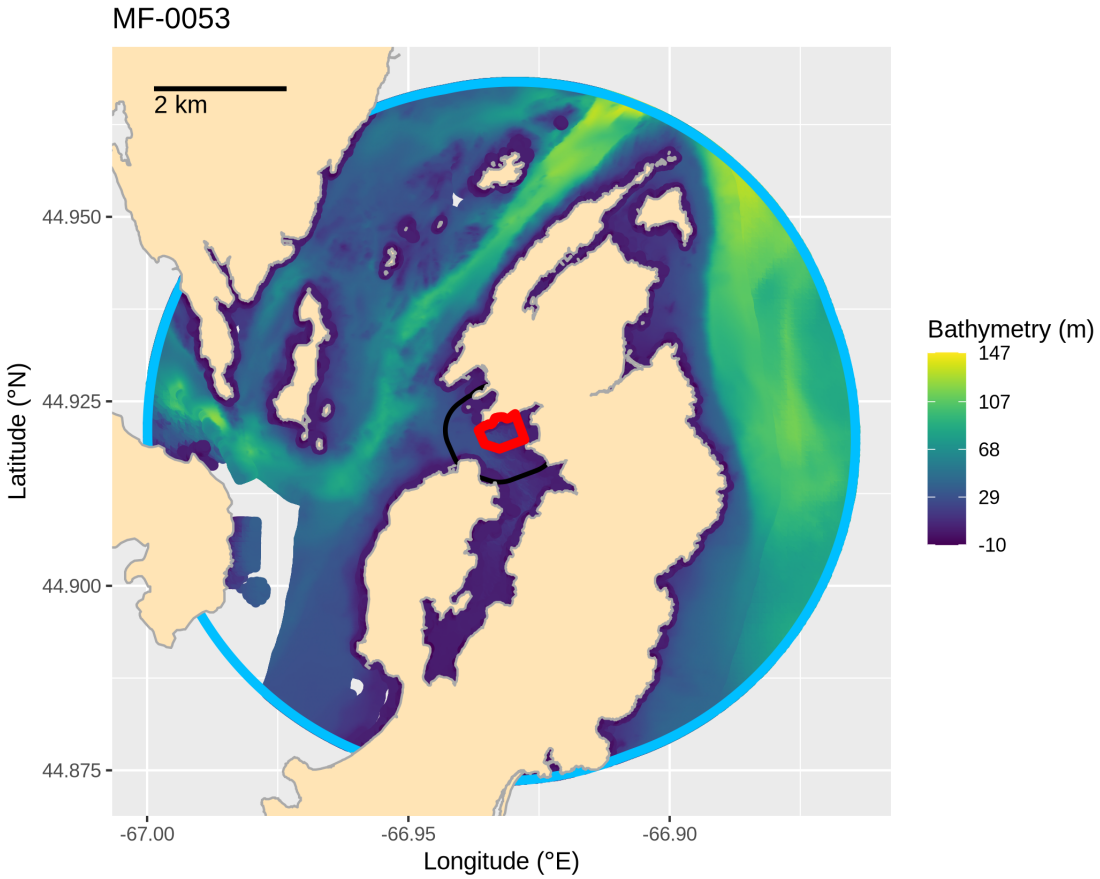


Figure 6.34.2. Farm MF-0053 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.35 Farm MF-0054

The lease centre for farm MF-0054 is 66.9350° W, 44.9168° N and the lease encompasses an area of 132208 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.35.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.35.2. Within the lease boundaries, the bathymetry ranges from 2 m to 28 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 36 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 123 m.

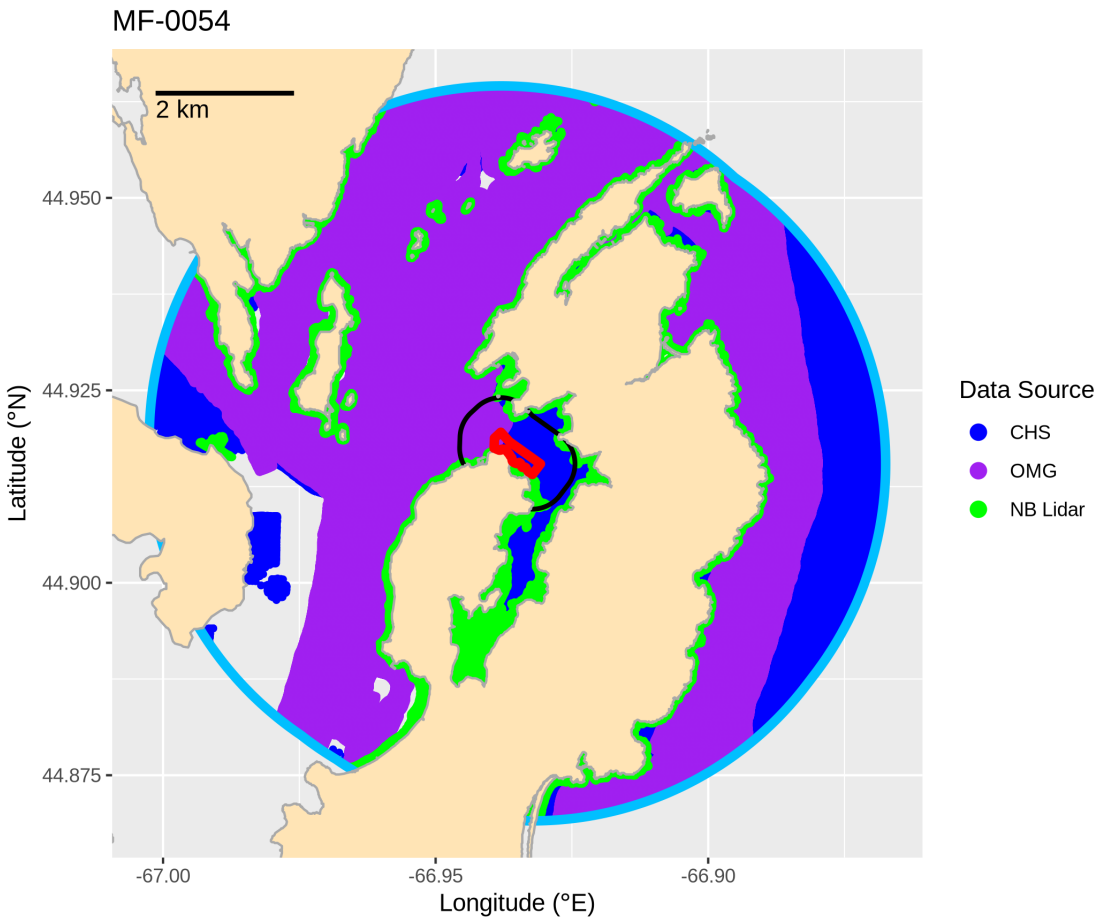


Figure 6.35.1. Farm MF-0054 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

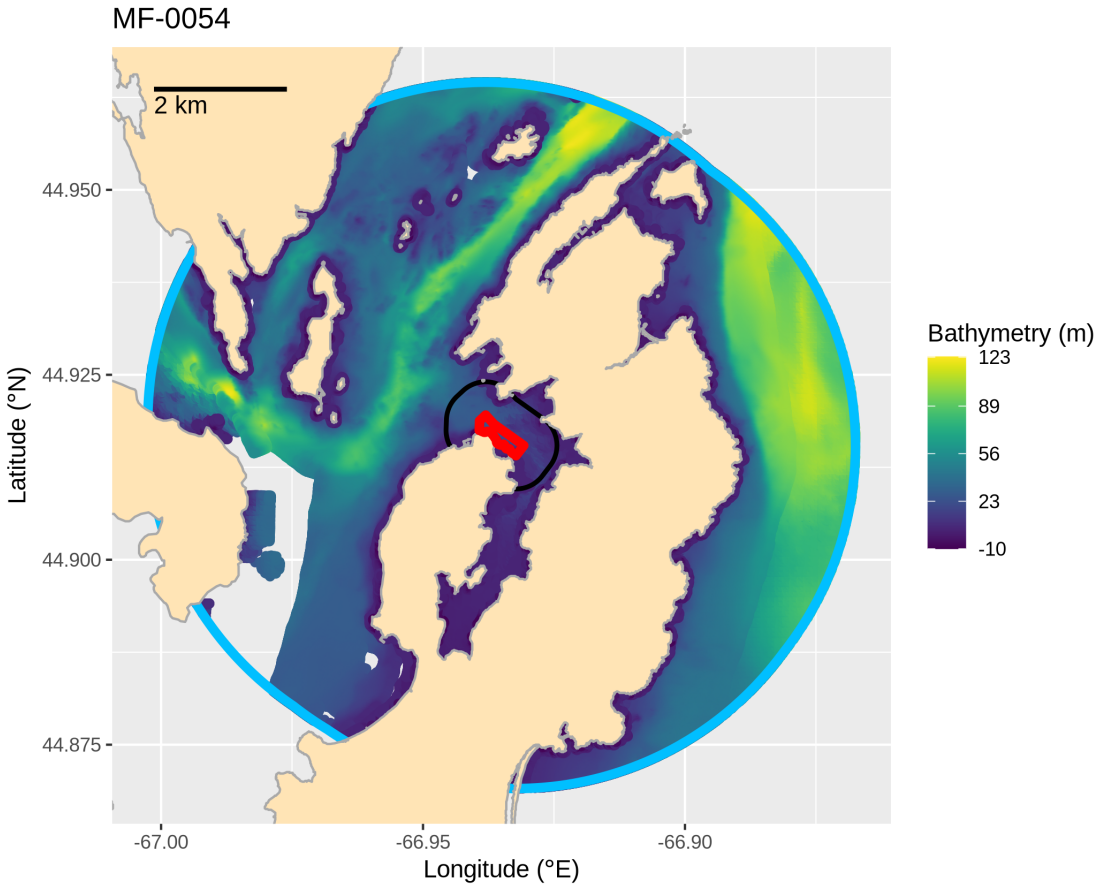


Figure 6.35.2. Farm MF-0054 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.36 Farm MF-0055

The lease centre for farm MF-0055 is 66.9594° W, 44.8863° N and the lease encompasses an area of 127326 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.36.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.36.2. Within the lease boundaries, the bathymetry ranges from 7 m to 28 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 29 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 121 m.

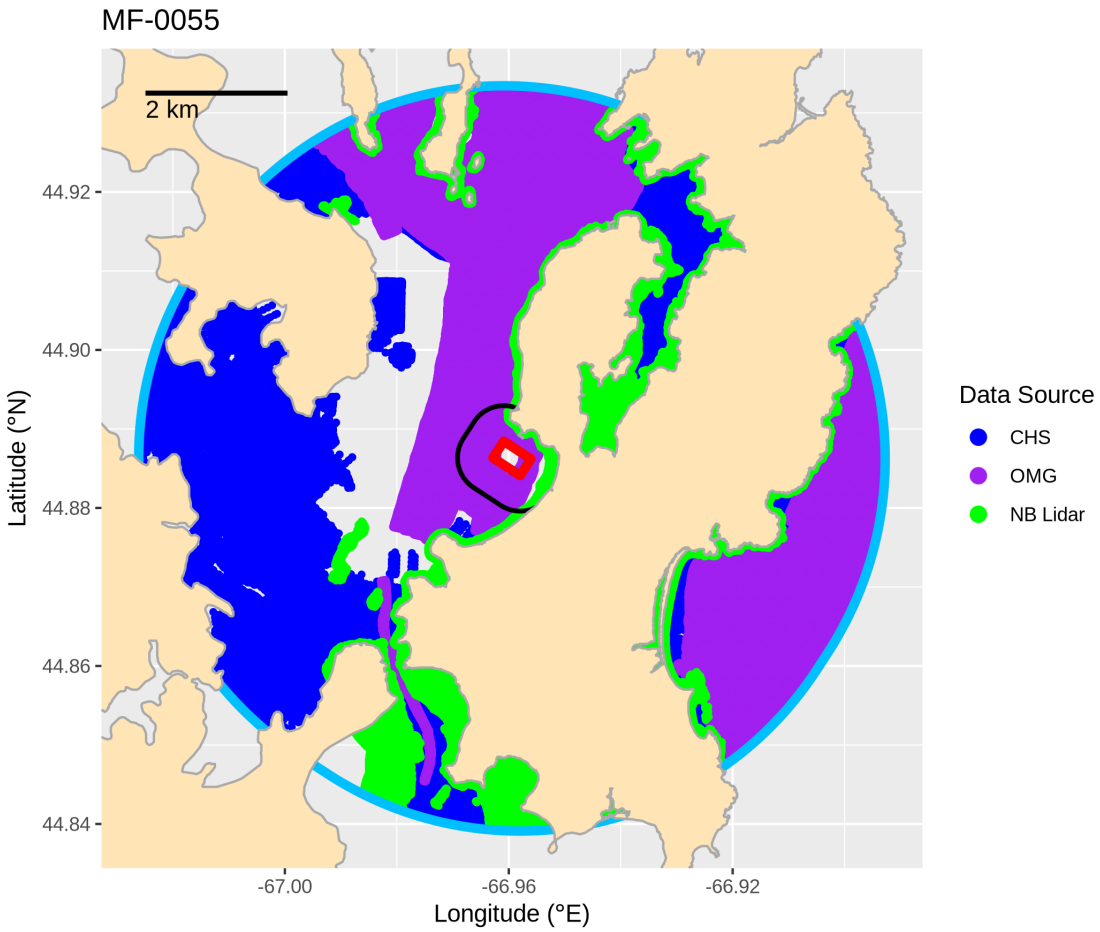


Figure 6.36.1. Farm MF-0055 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

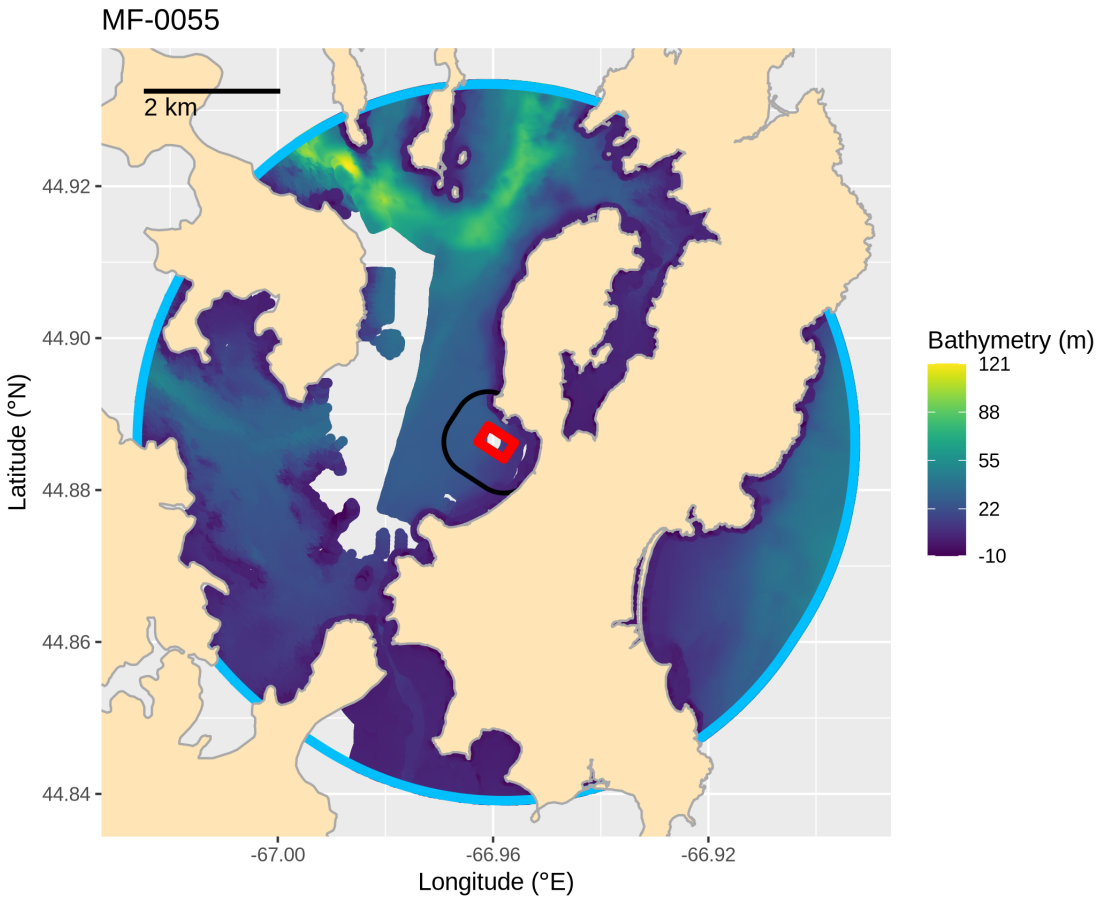


Figure 6.36.2. Farm MF-0055 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.37 Farm MF-0056

The lease centre for farm MF-0056 is 66.9761° W, 44.8737° N and the lease encompasses an area of 114633 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.37.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.37.2. Within the lease boundaries, the bathymetry ranges from -3 m to 15 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 28 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 106 m.

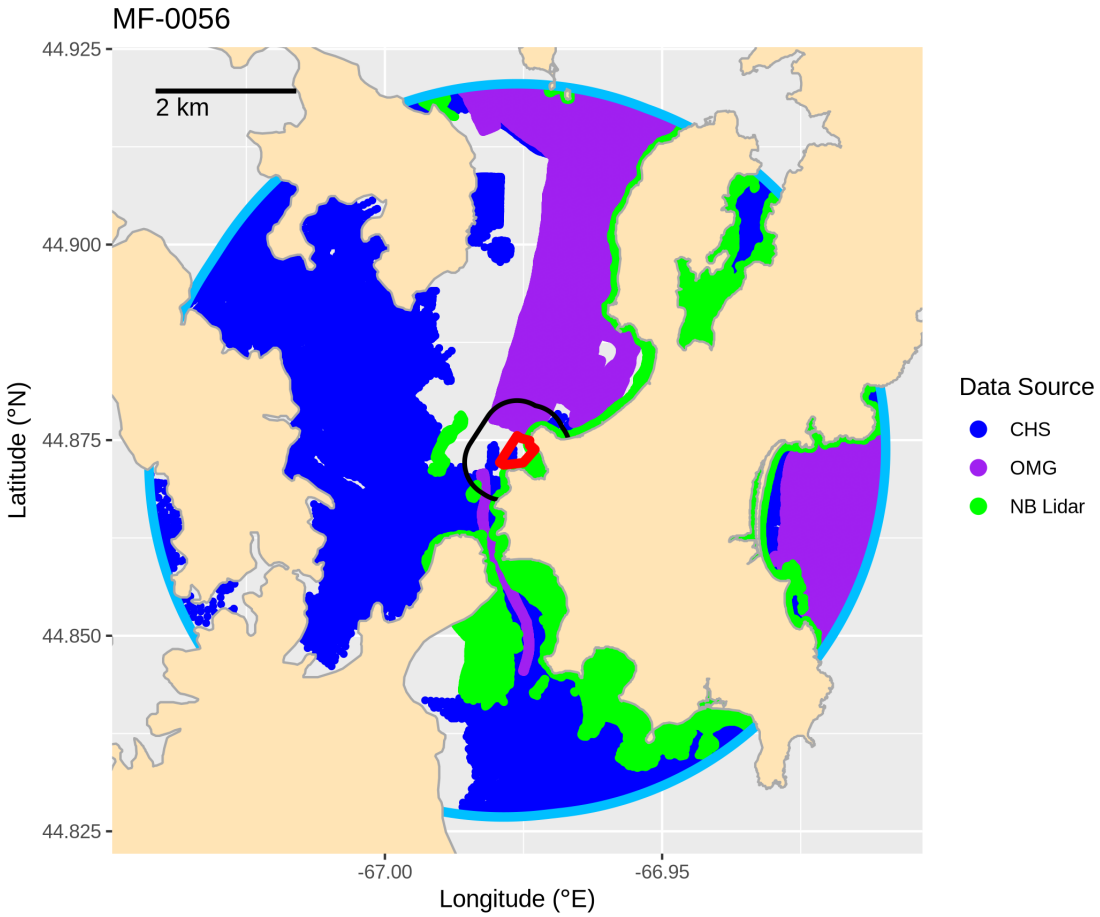


Figure 6.37.1. Farm MF-0056 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

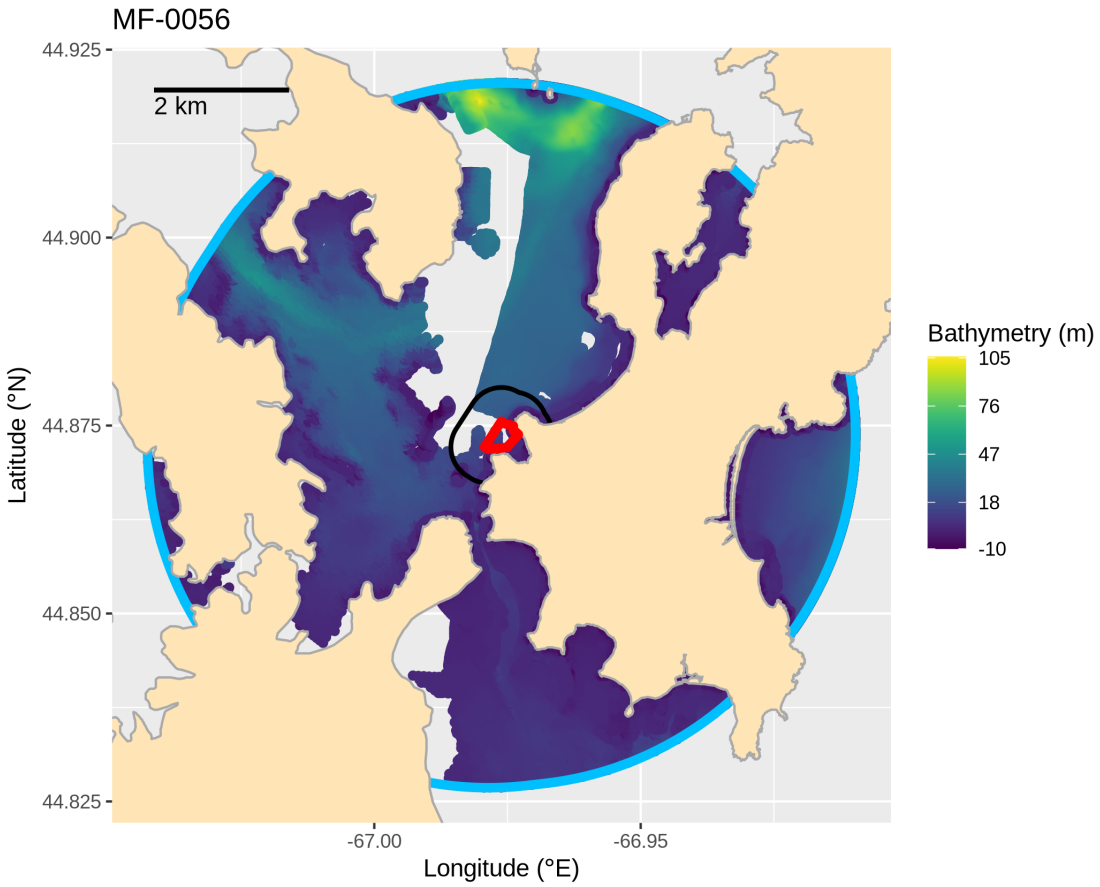


Figure 6.37.2. Farm MF-0056 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.38 Farm MF-0057

The lease centre for farm MF-0057 is 66.9961° W, 44.9427° N and the lease encompasses an area of 141557 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.38.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.38.2. Within the lease boundaries, the bathymetry ranges from -10 m to 26 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 66 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 121 m.

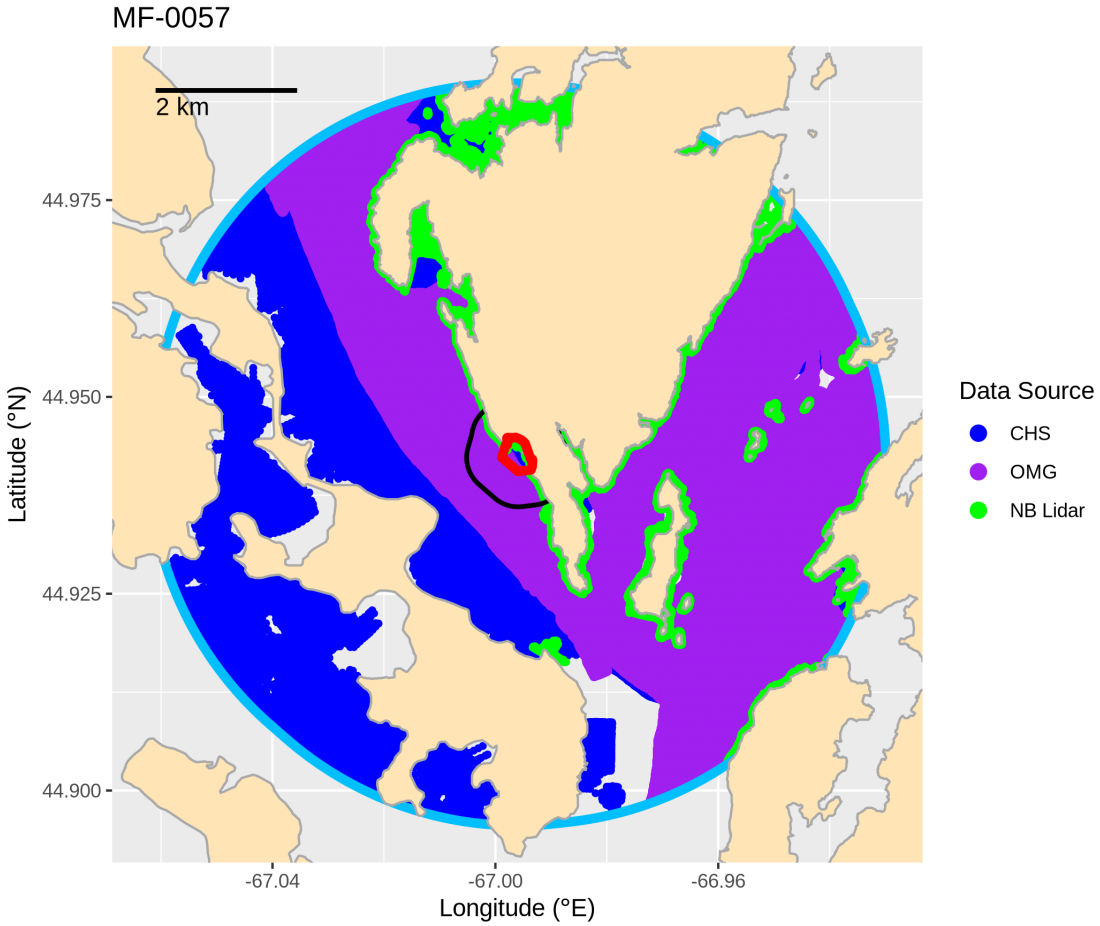


Figure 6.38.1. Farm MF-0057 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

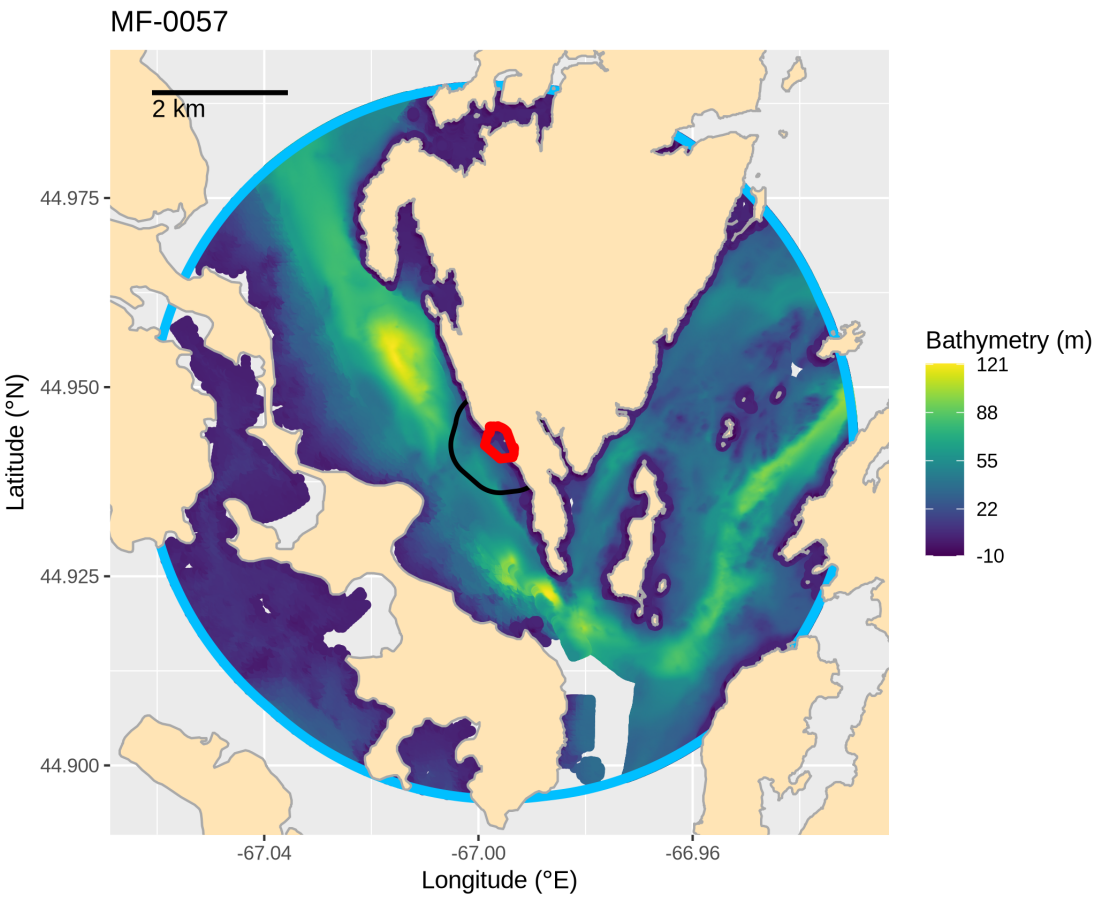


Figure 6.38.2. Farm MF-0057 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.39 Farm MF-0058

The lease centre for farm MF-0058 is 67.0092° W, 44.9625° N and the lease encompasses an area of 33579 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.39.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.39.2. Within the lease boundaries, the bathymetry ranges from -2 m to 18 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 85 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 121 m.

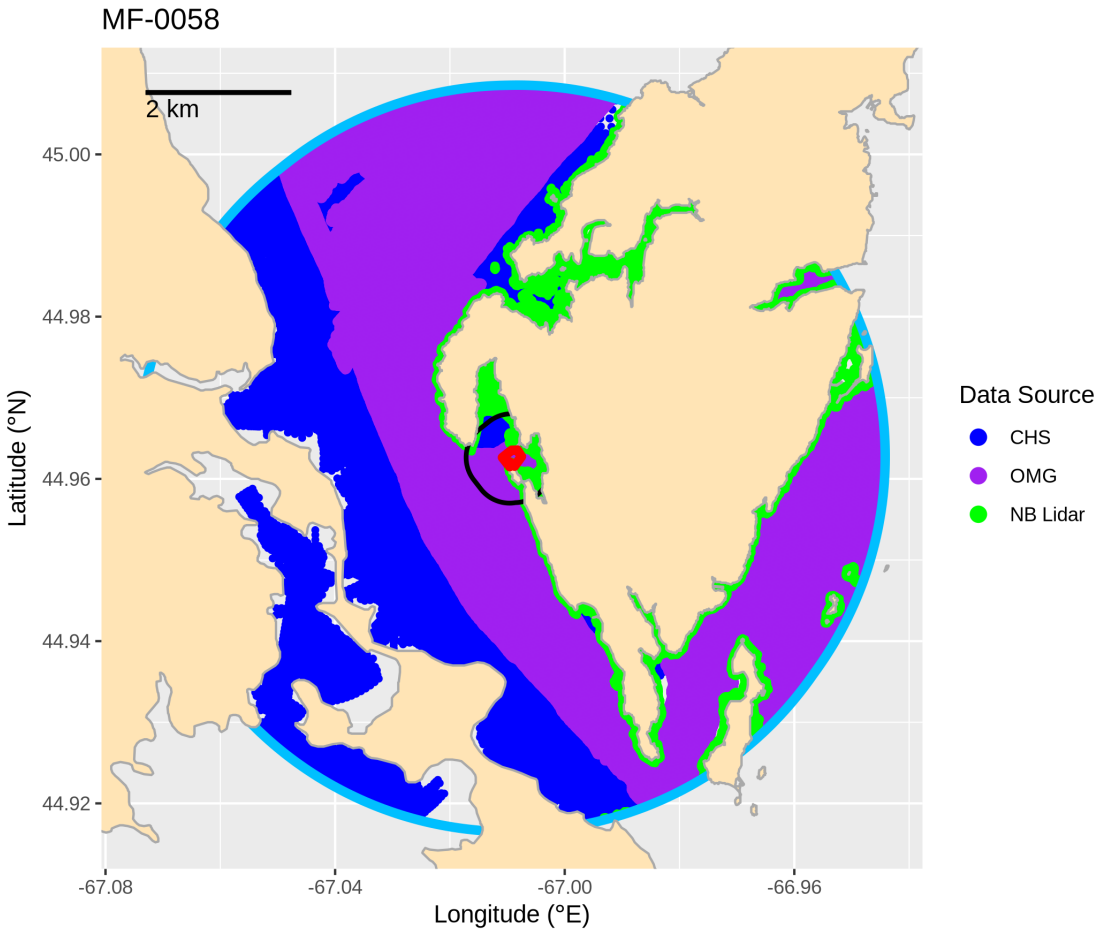


Figure 6.39.1. Farm MF-0058 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

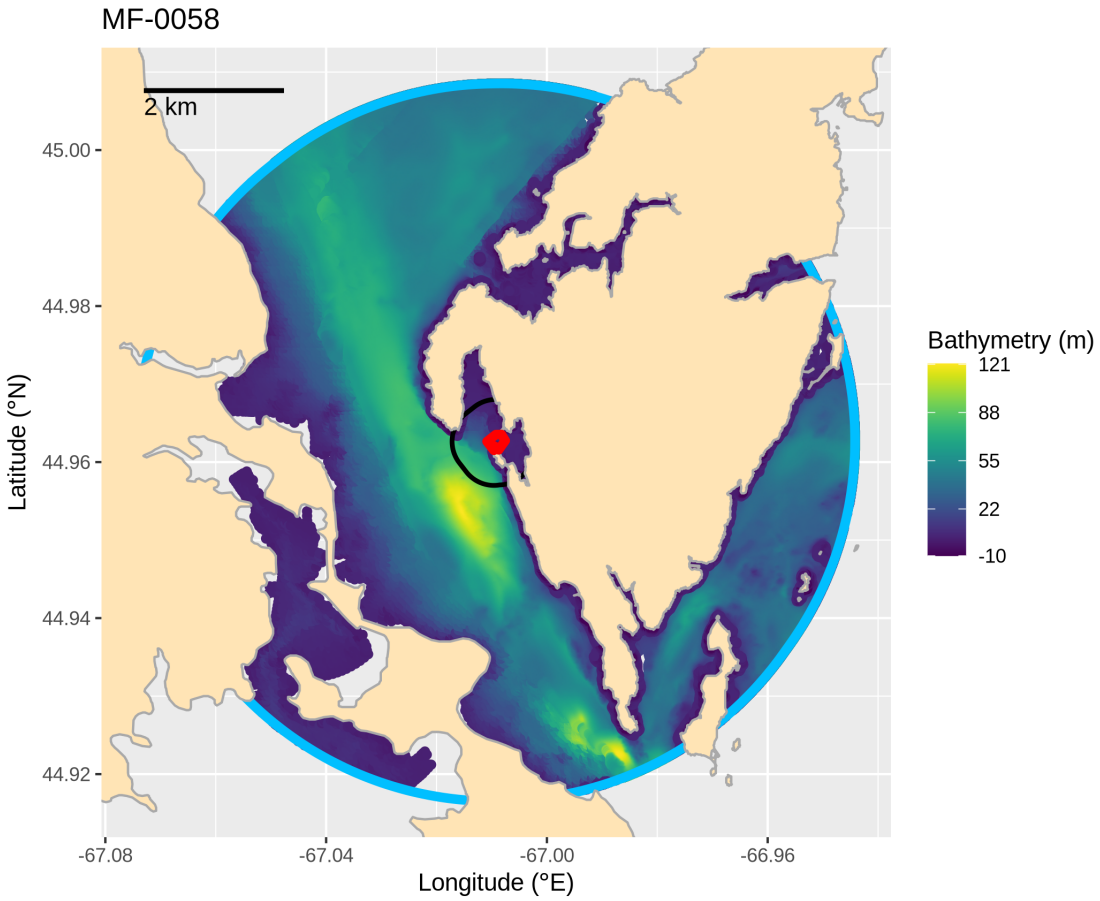


Figure 6.39.2. Farm MF-0058 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.40 Farm MF-0059

The lease centre for farm MF-0059 is 67.0133° W, 44.9655° N and the lease encompasses an area of 161575 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.40.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.40.2. Within the lease boundaries, the bathymetry ranges from -5 m to 27 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 89 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 121 m.

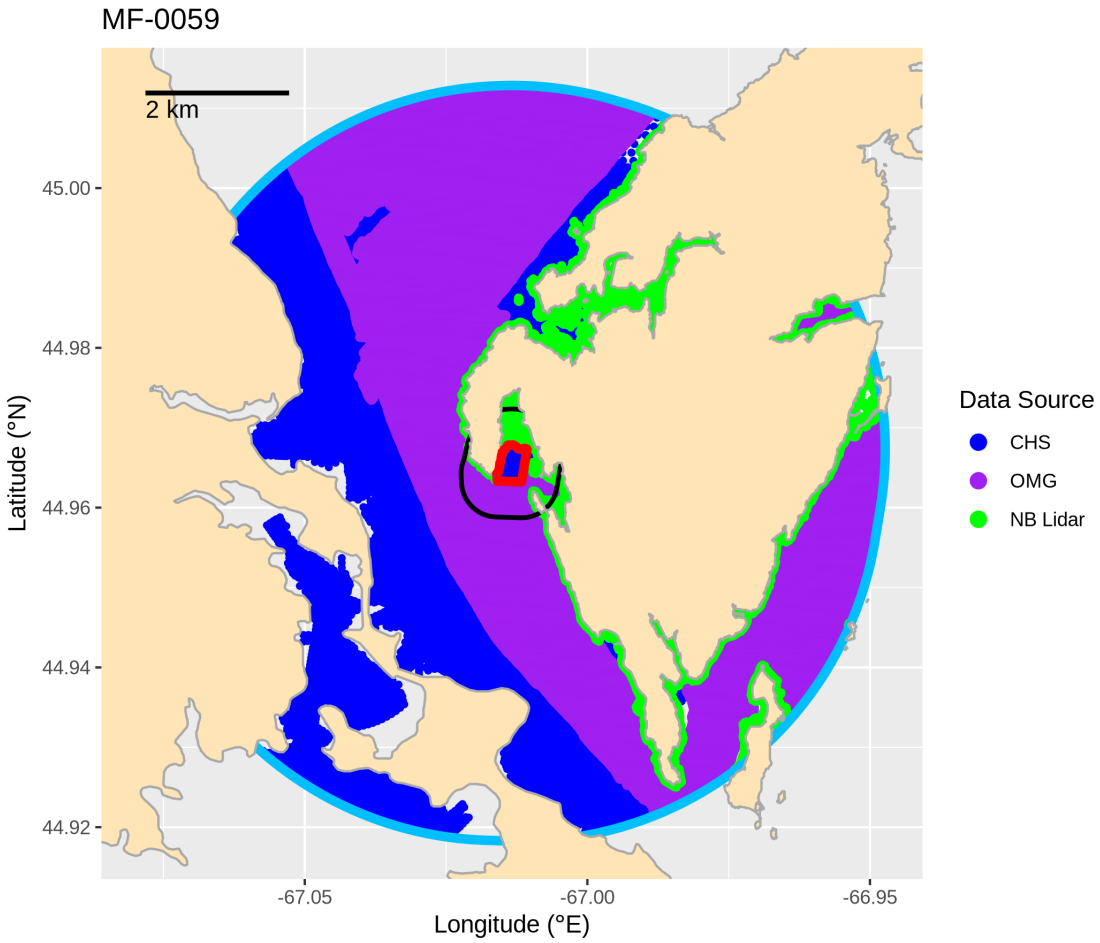


Figure 6.40.1. Farm MF-0059 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

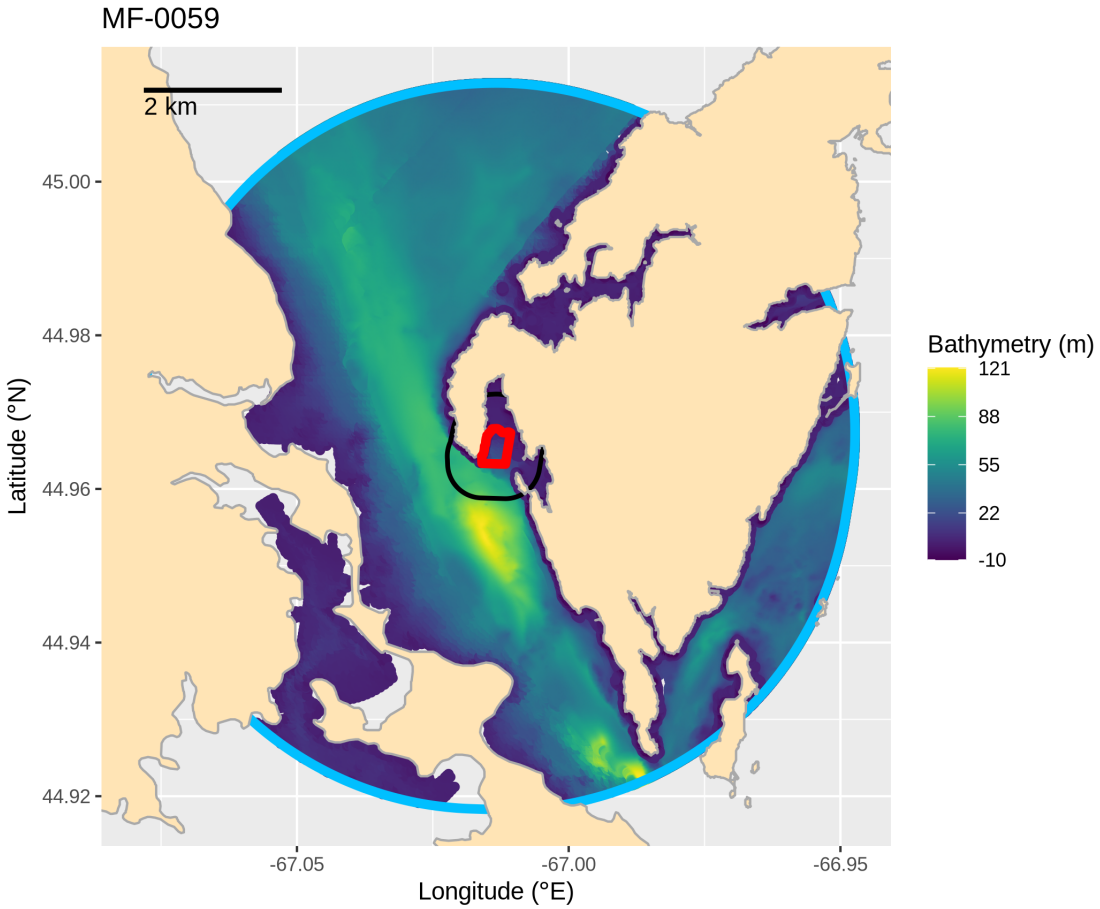


Figure 6.40.2. Farm MF-0059 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.41 Farm MF-0060

The lease centre for farm MF-0060 is 67.0132° W, 44.9877° N and the lease encompasses an area of 160096 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.41.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.41.2. Within the lease boundaries, the bathymetry ranges from -2 m to 56 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 58 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 121 m.

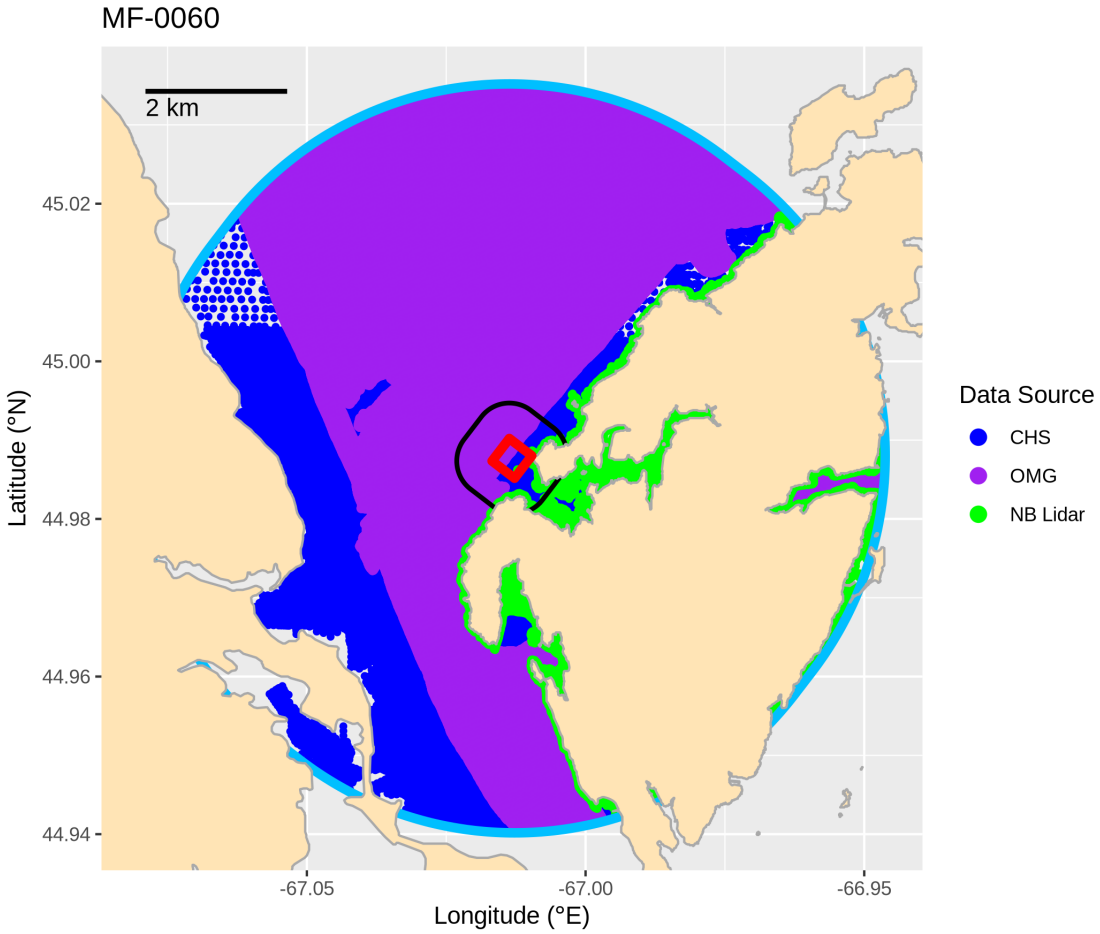


Figure 6.41.1. Farm MF-0060 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

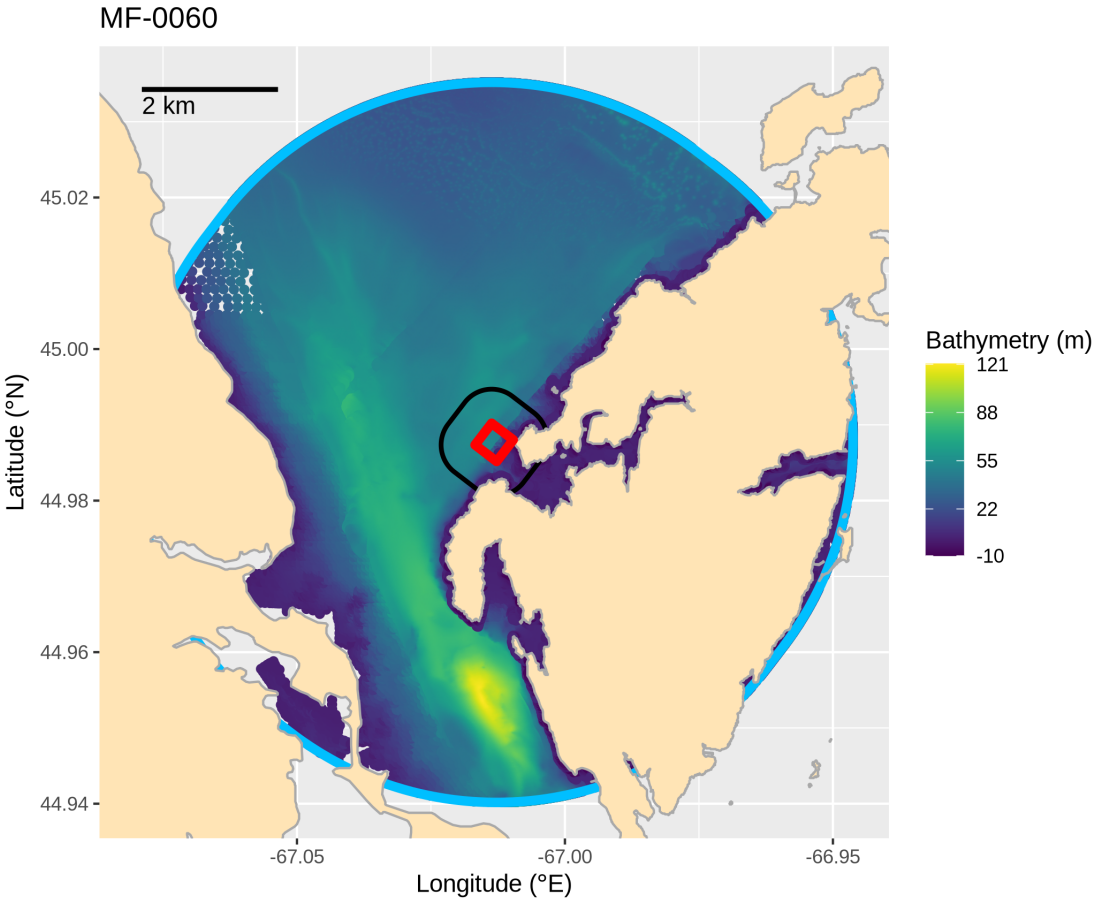


Figure 6.41.2. Farm MF-0060 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.42 Farm MF-0061

The lease centre for farm MF-0061 is 67.0272° W, 45.1285° N and the lease encompasses an area of 240457 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.42.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.42.2. Within the lease boundaries, the bathymetry ranges from 20 m to 35 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 50 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 79 m.

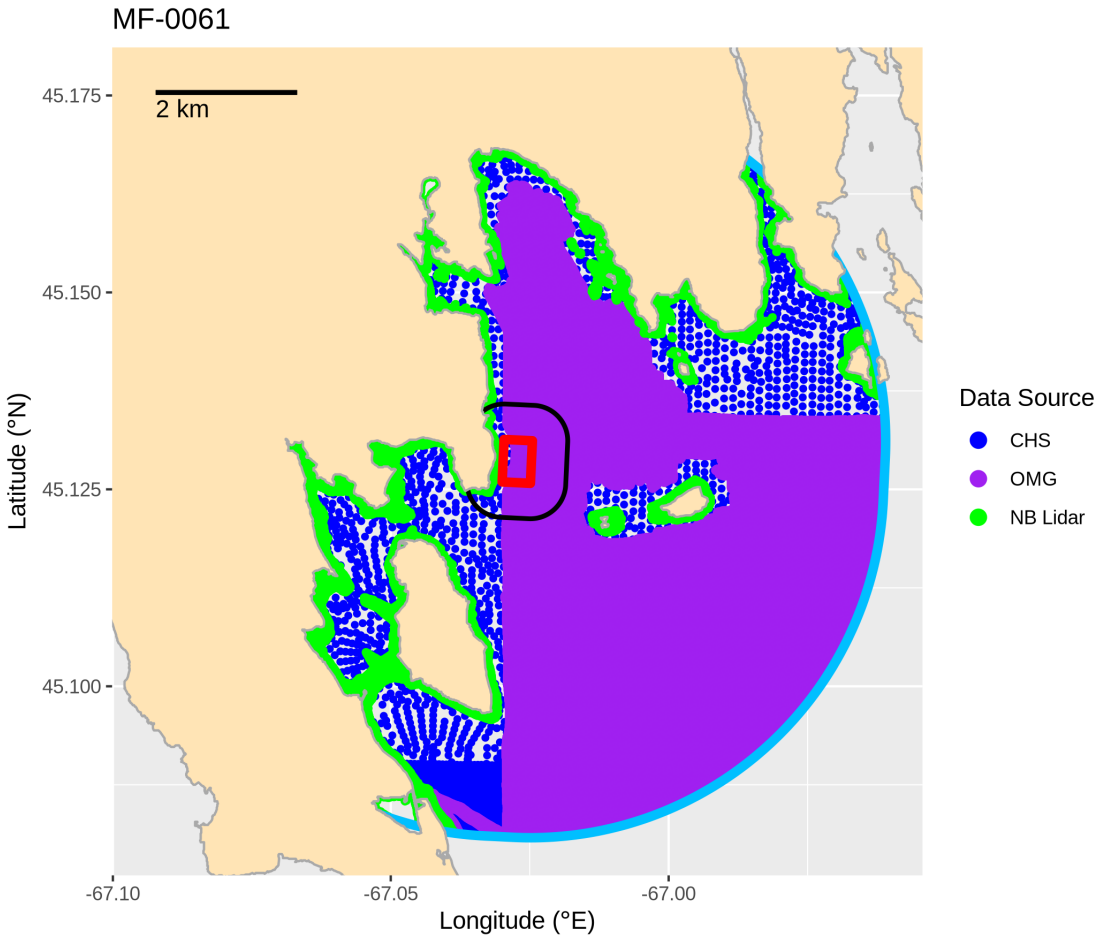


Figure 6.42.1. Farm MF-0061 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

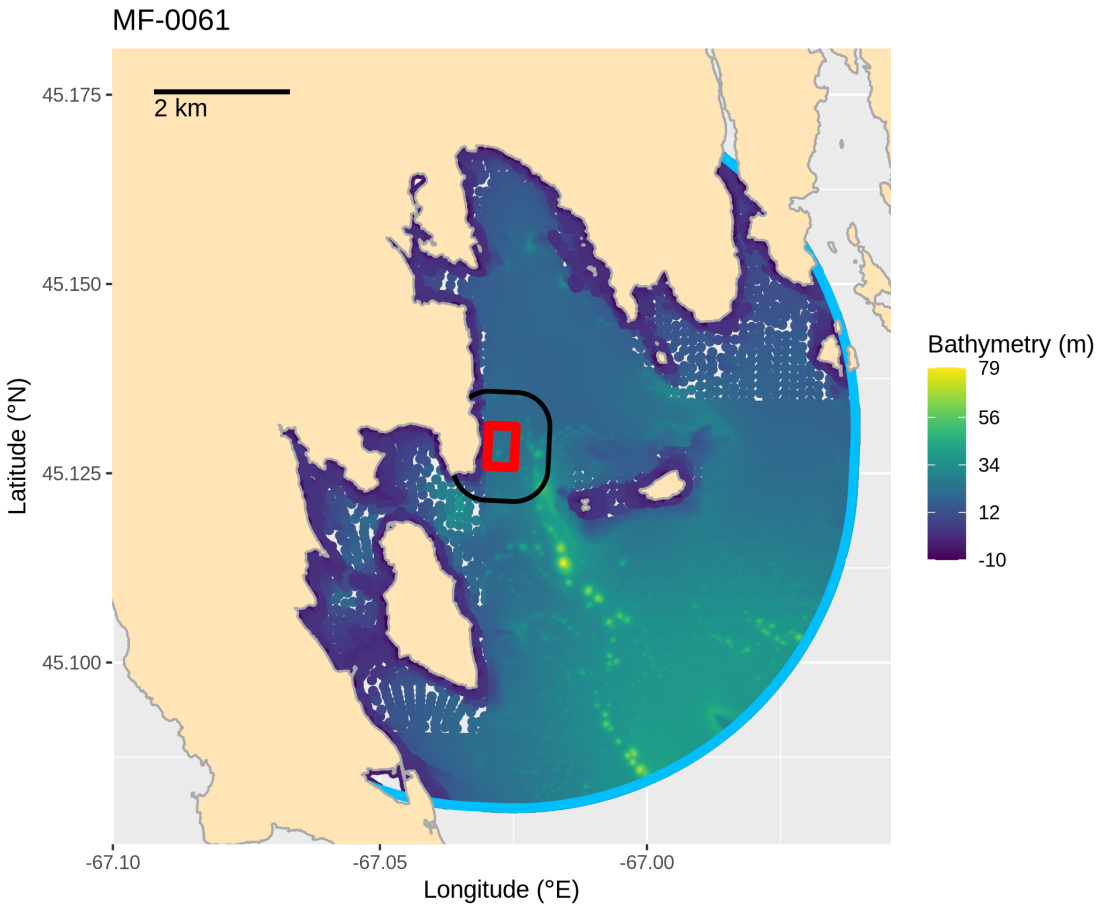


Figure 6.42.2. Farm MF-0061 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.43 Farm MF-0084

The lease centre for farm MF-0084 is 67.0127° W, 45.1254° N and the lease encompasses an area of 291018 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.43.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.43.2. Within the lease boundaries, the bathymetry ranges from 14 m to 32 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -8 m to 58 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 79 m.

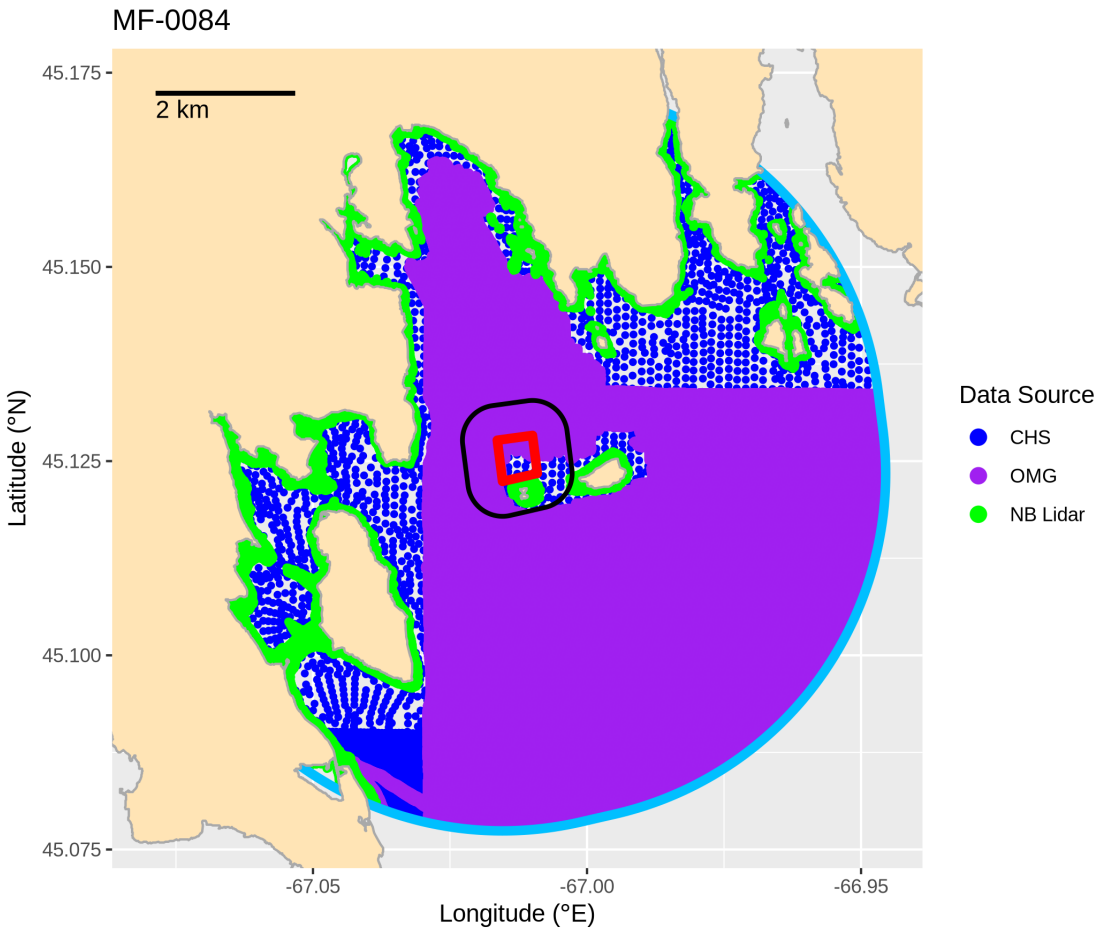


Figure 6.43.1. Farm MF-0084 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

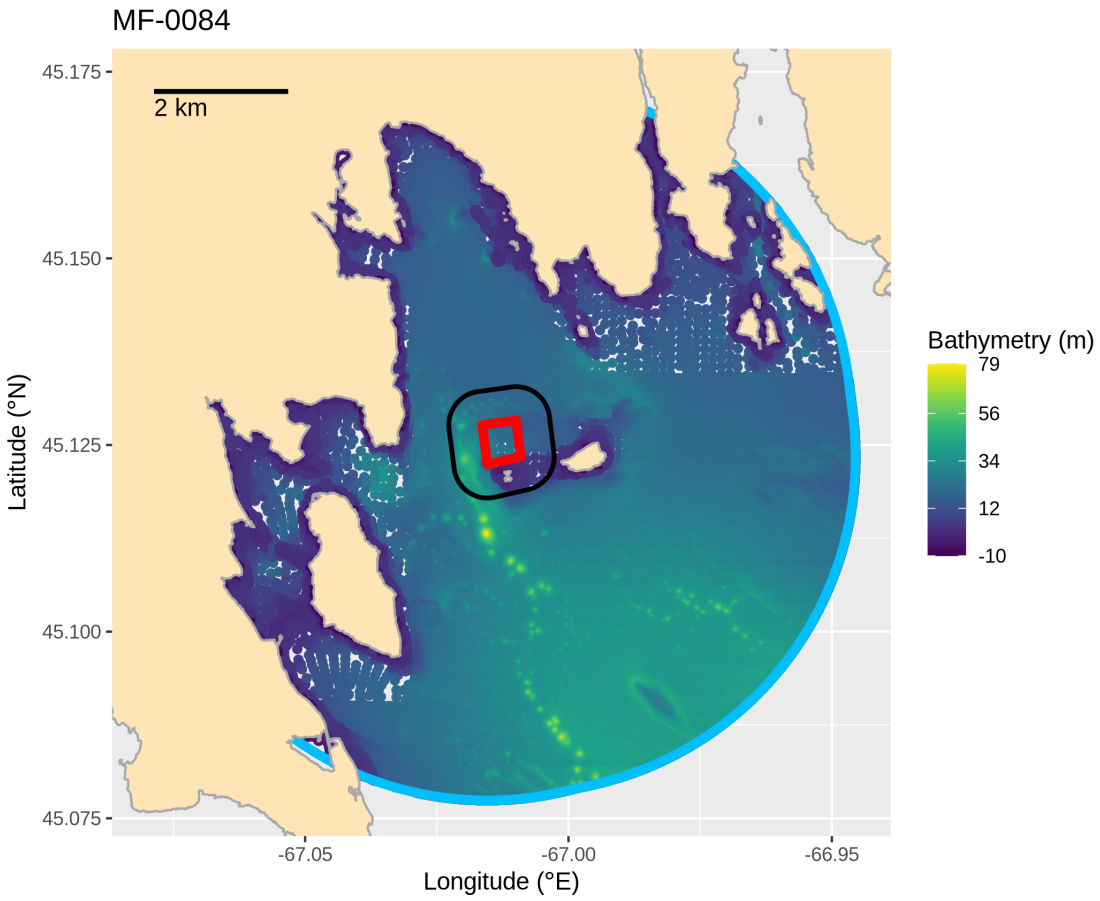


Figure 6.43.2. Farm MF-0084 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.44 Farm MF-0095

The lease centre for farm MF-0095 is 66.8462° W, 45.0694° N and the lease encompasses an area of 50256 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.44.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.44.2. Within the lease boundaries, the bathymetry ranges from -3 m to 20 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 22 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 103 m.

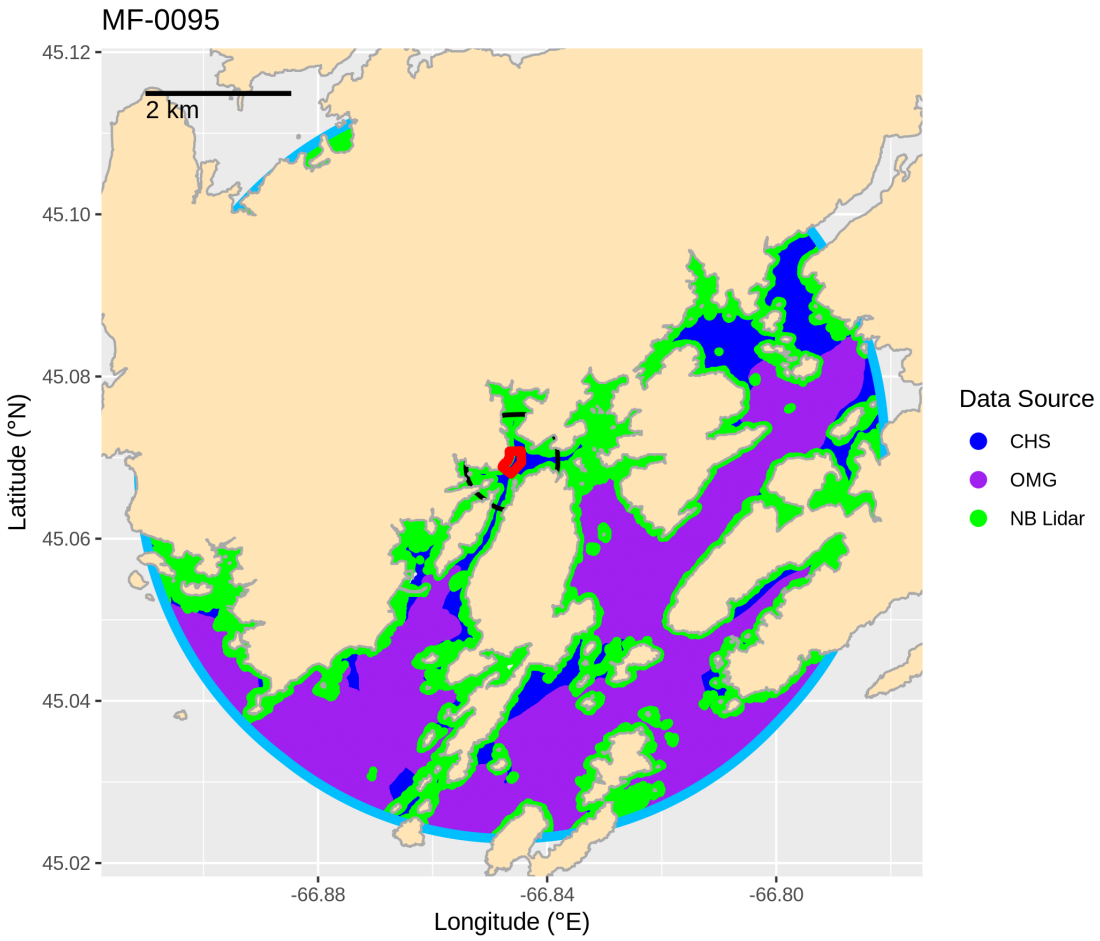


Figure 6.44.1. Farm MF-0095 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

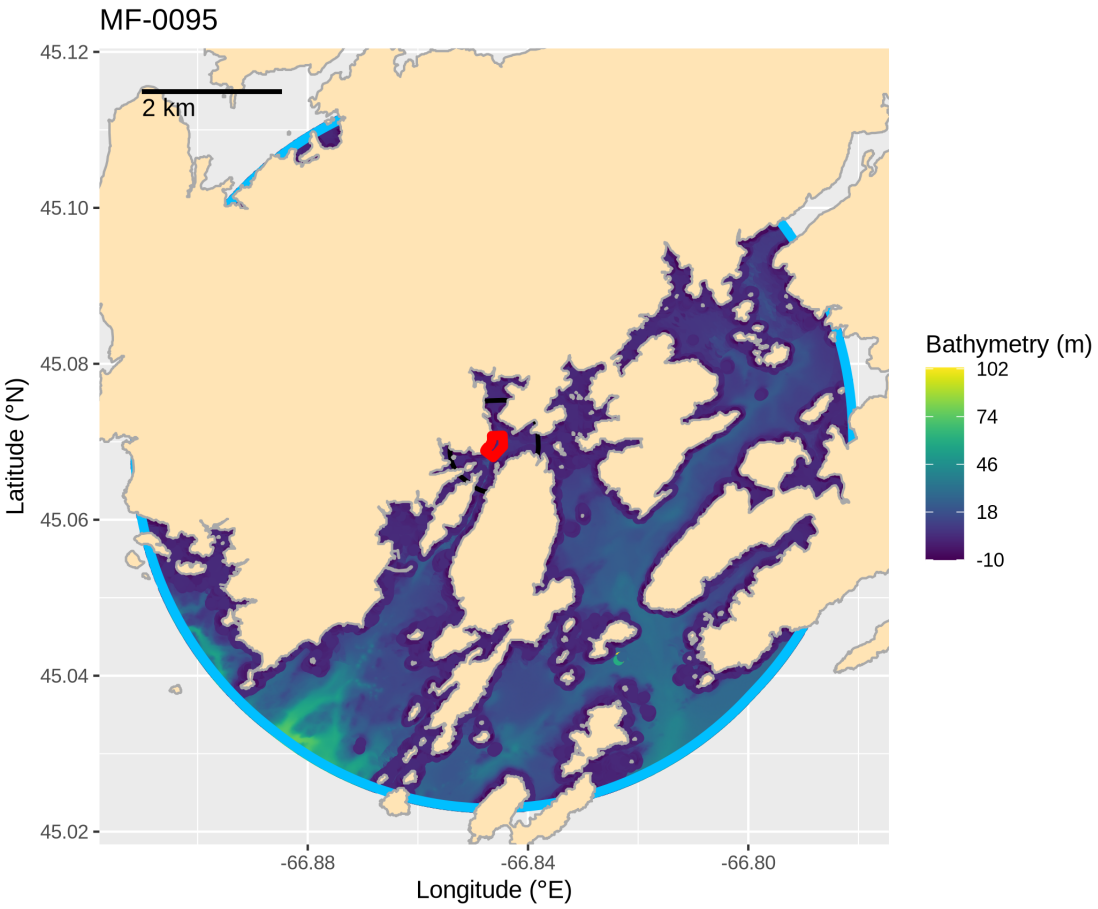


Figure 6.44.2. Farm MF-0095 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.45 Farm MF-0159

The lease centre for farm MF-0159 is 66.8474° W, 45.0642° N and the lease encompasses an area of 35480 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.45.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.45.2. Within the lease boundaries, the bathymetry ranges from -3 m to 22 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 23 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 103 m.

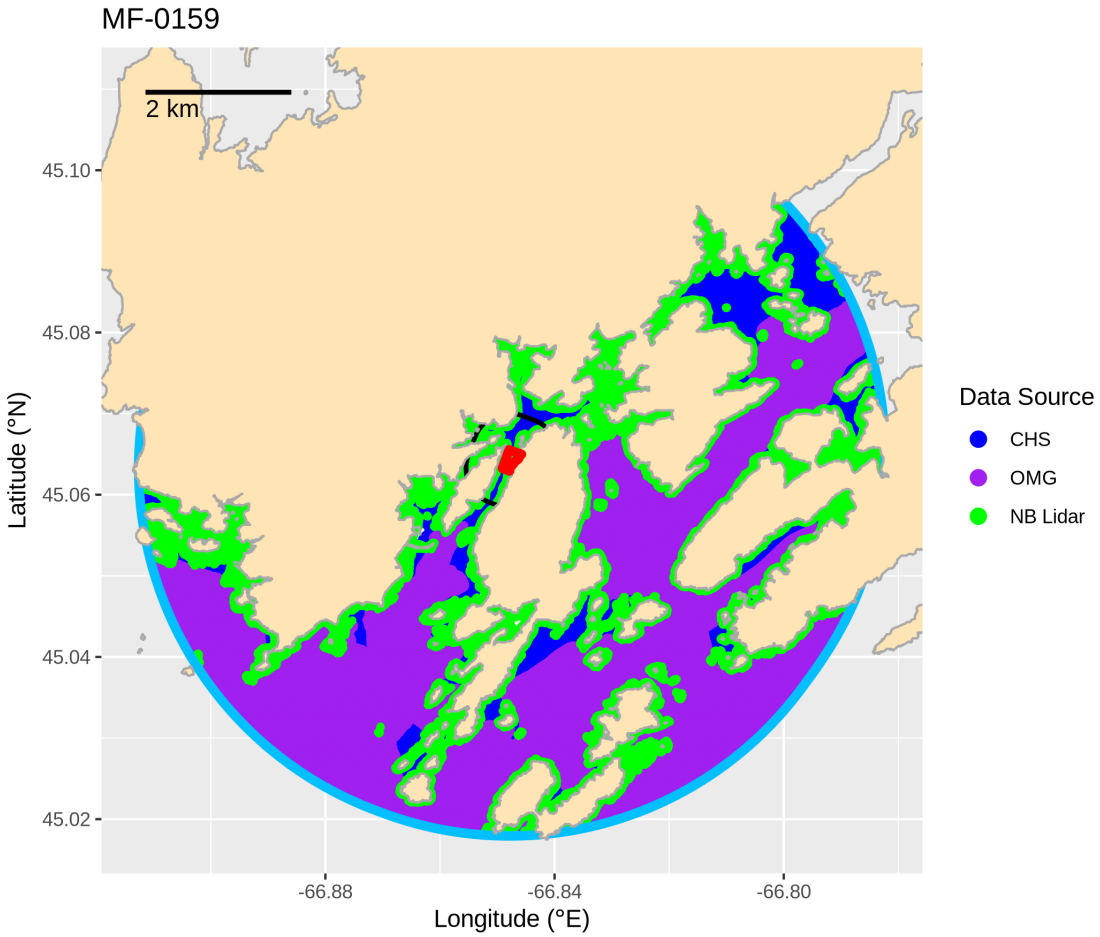


Figure 6.45.1. Farm MF-0159 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

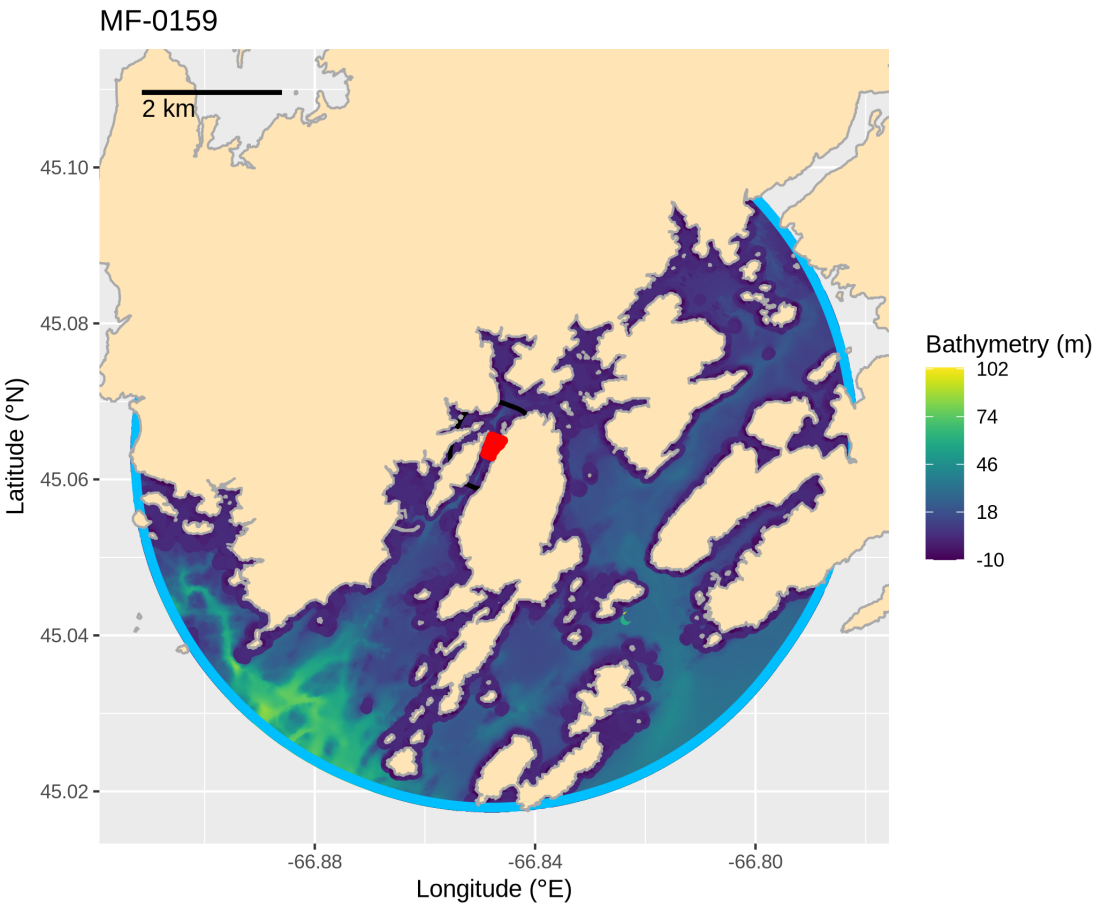


Figure 6.45.2. Farm MF-0159 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.46 Farm MF-0168

The lease centre for farm MF-0168 is 66.9675° W, 44.8777° N and the lease encompasses an area of 243602 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.46.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.46.2. Within the lease boundaries, the bathymetry ranges from -5 m to 26 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 29 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 121 m.

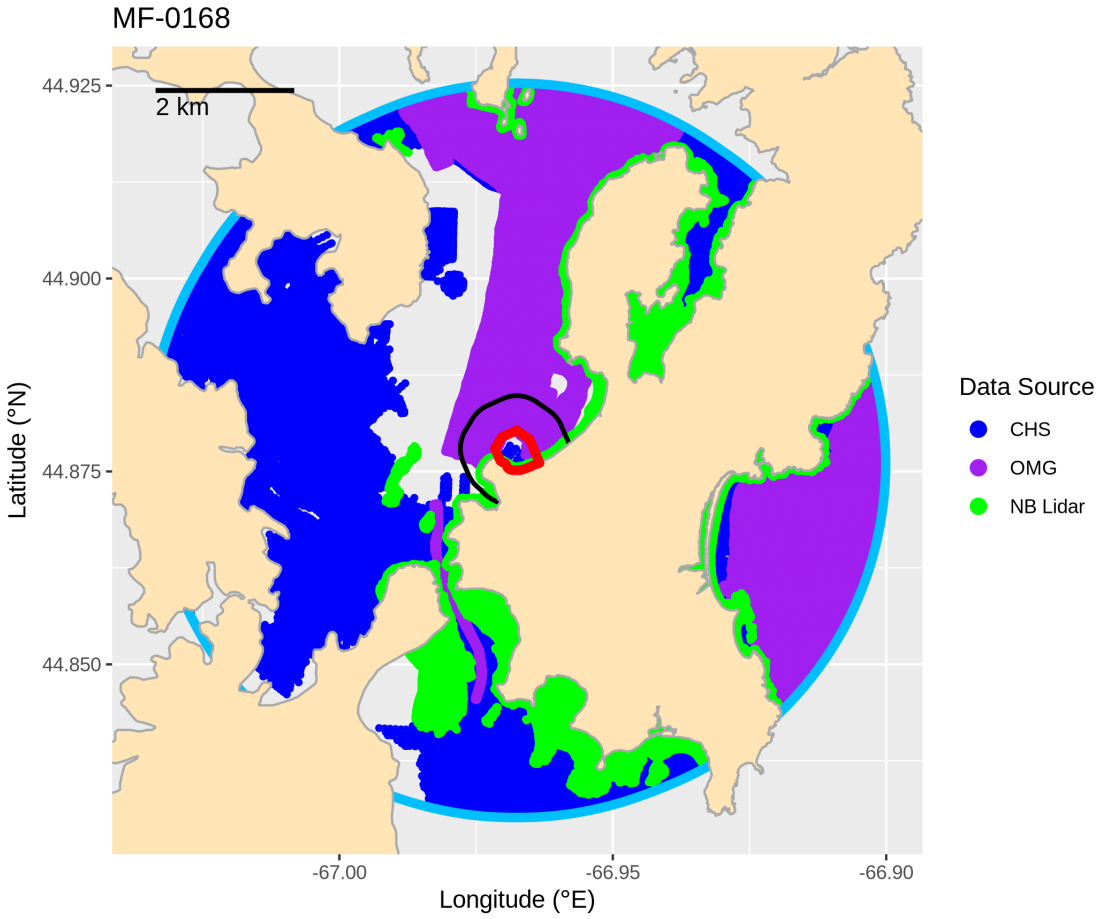


Figure 6.46.1. Farm MF-0168 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

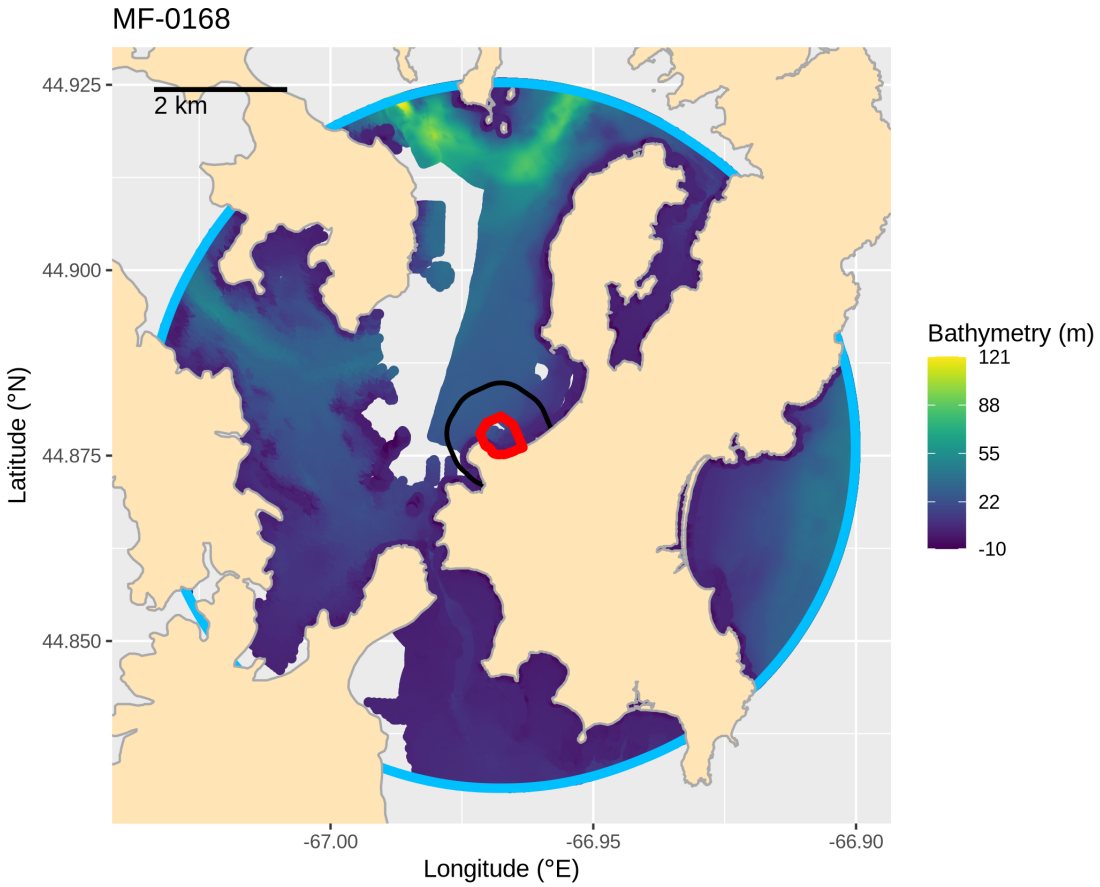


Figure 6.46.2. Farm MF-0168 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.47 Farm MF-0172

The lease centre for farm MF-0172 is 66.7234° W, 44.6667° N and the lease encompasses an area of 490779 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.47.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.47.2. Within the lease boundaries, the bathymetry ranges from -9 m to 14 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 16 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 106 m.

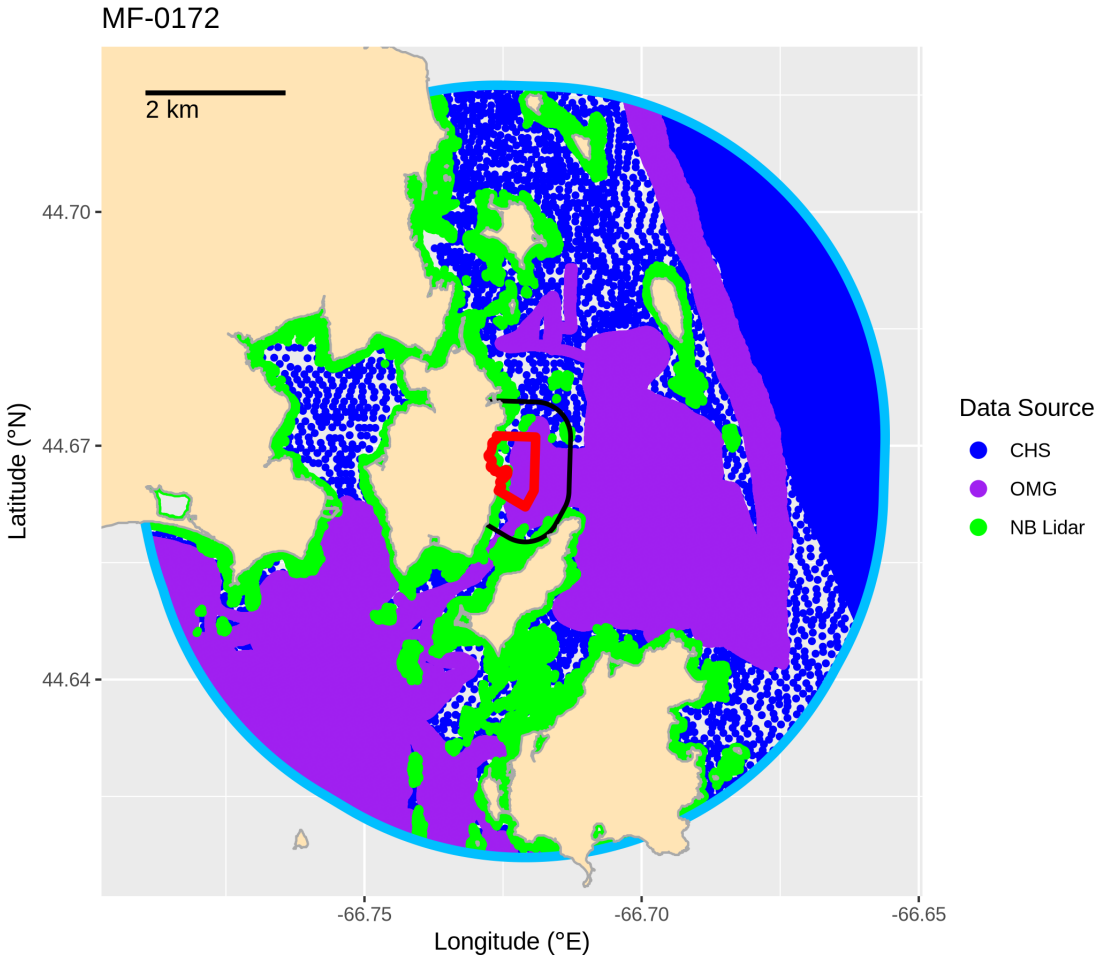


Figure 6.47.1. Farm MF-0172 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

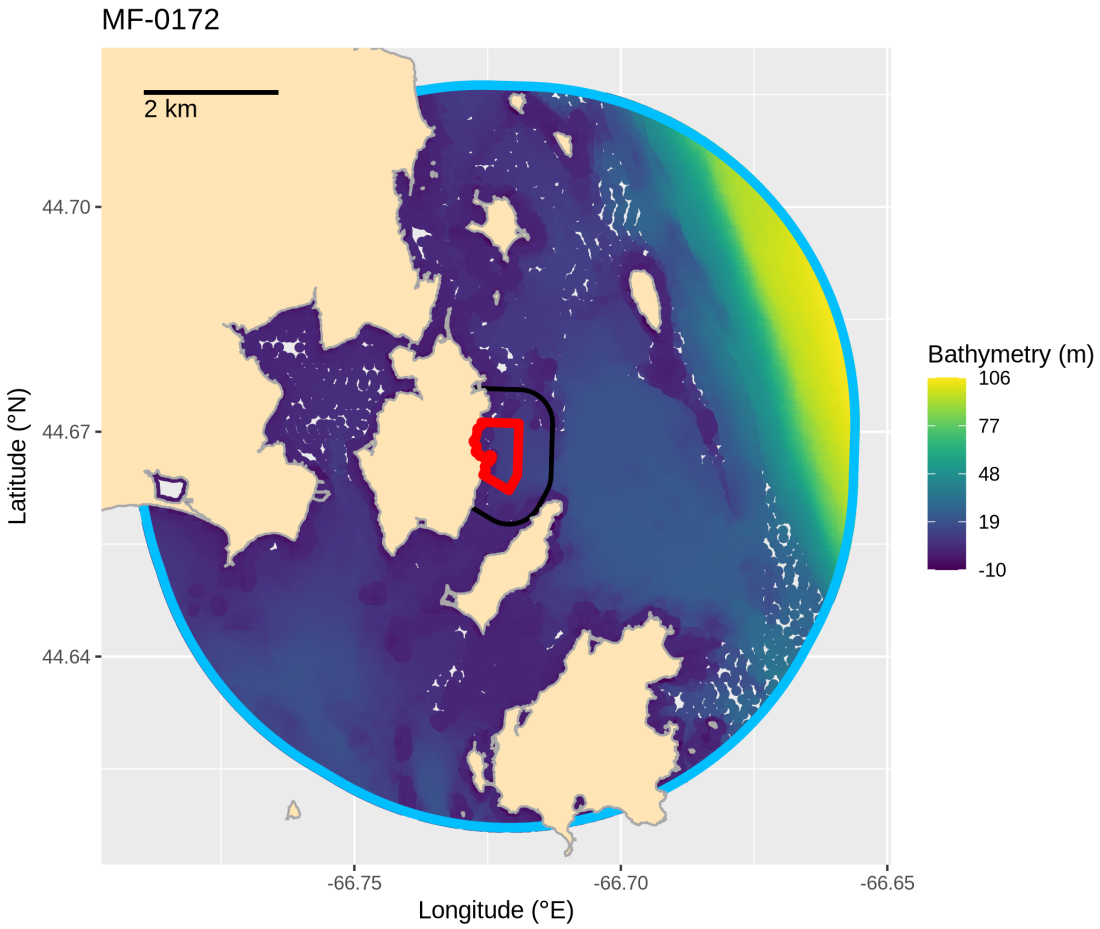


Figure 6.47.2. Farm MF-0172 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.48 Farm MF-0179

The lease centre for farm MF-0179 is 66.9939° W, 45.0063° N and the lease encompasses an area of 186849 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.48.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.48.2. Within the lease boundaries, the bathymetry ranges from 39 m to 44 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 47 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 83 m.

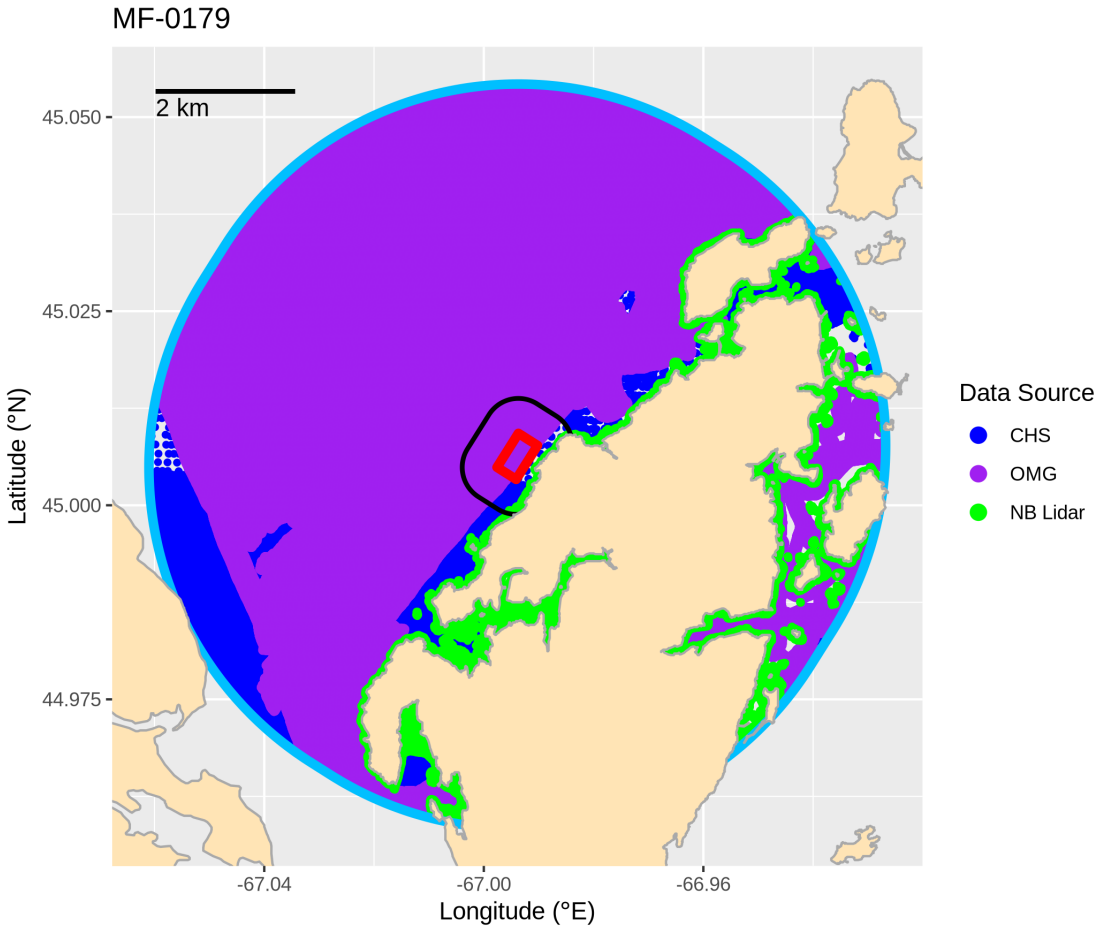


Figure 6.48.1. Farm MF-0179 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

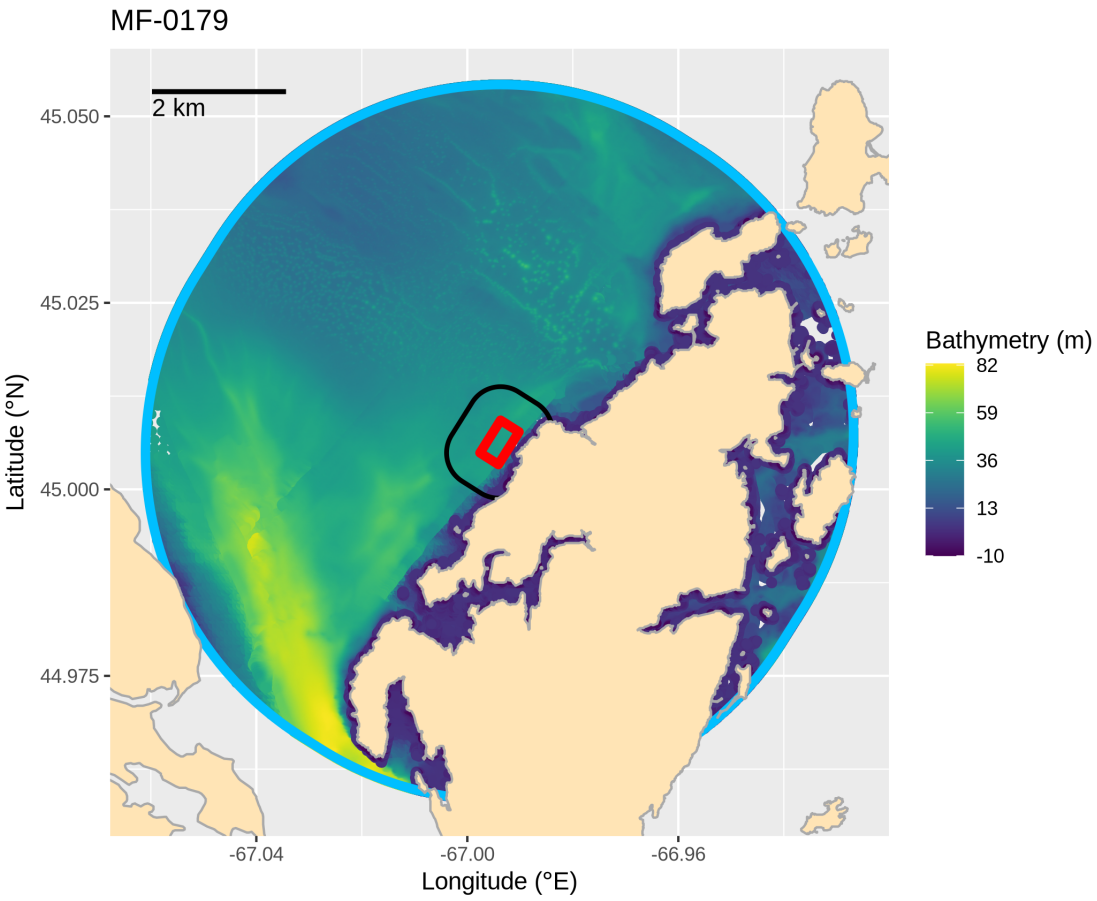


Figure 6.48.2. Farm MF-0179 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.49 Farm MF-0186

The lease centre for farm MF-0186 is 66.9020° W, 44.9536° N and the lease encompasses an area of 64306 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.49.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.49.2. Within the lease boundaries, the bathymetry ranges from -6 m to 23 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 58 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 149 m.

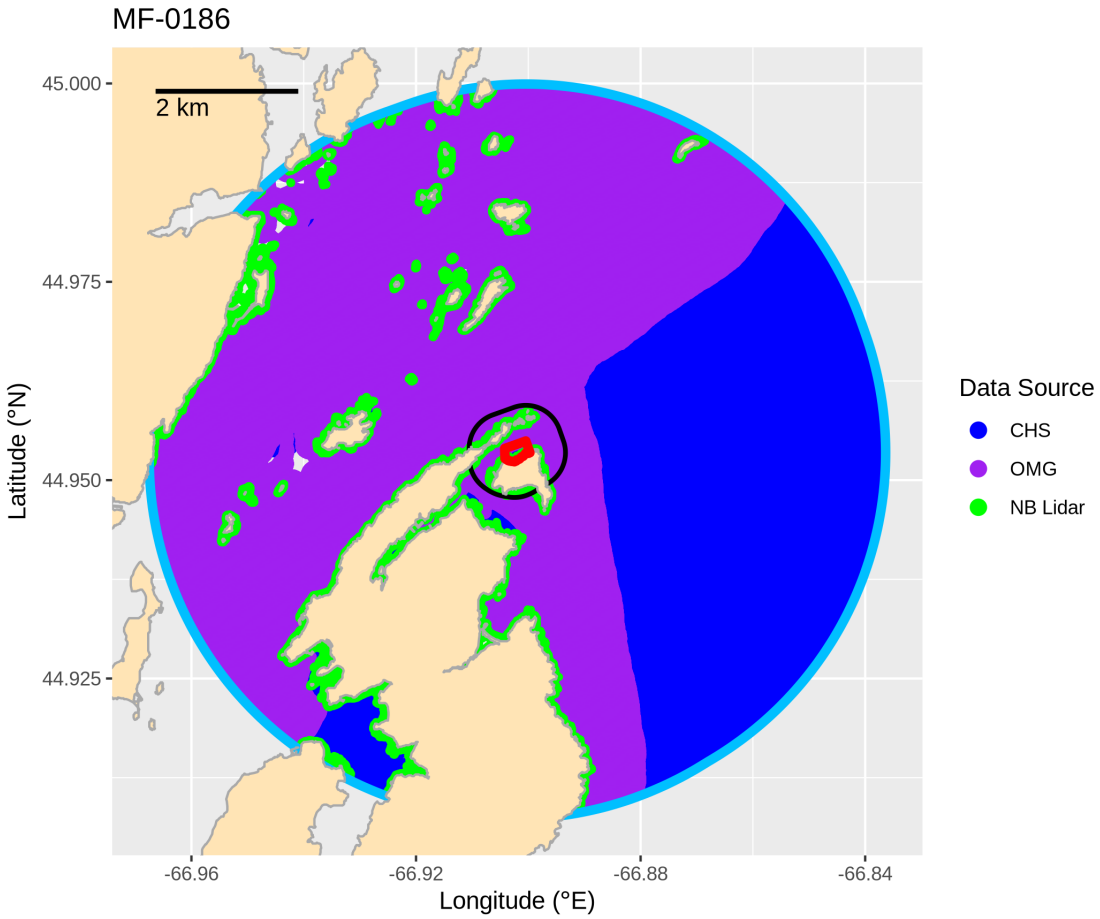


Figure 6.49.1. Farm MF-0186 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

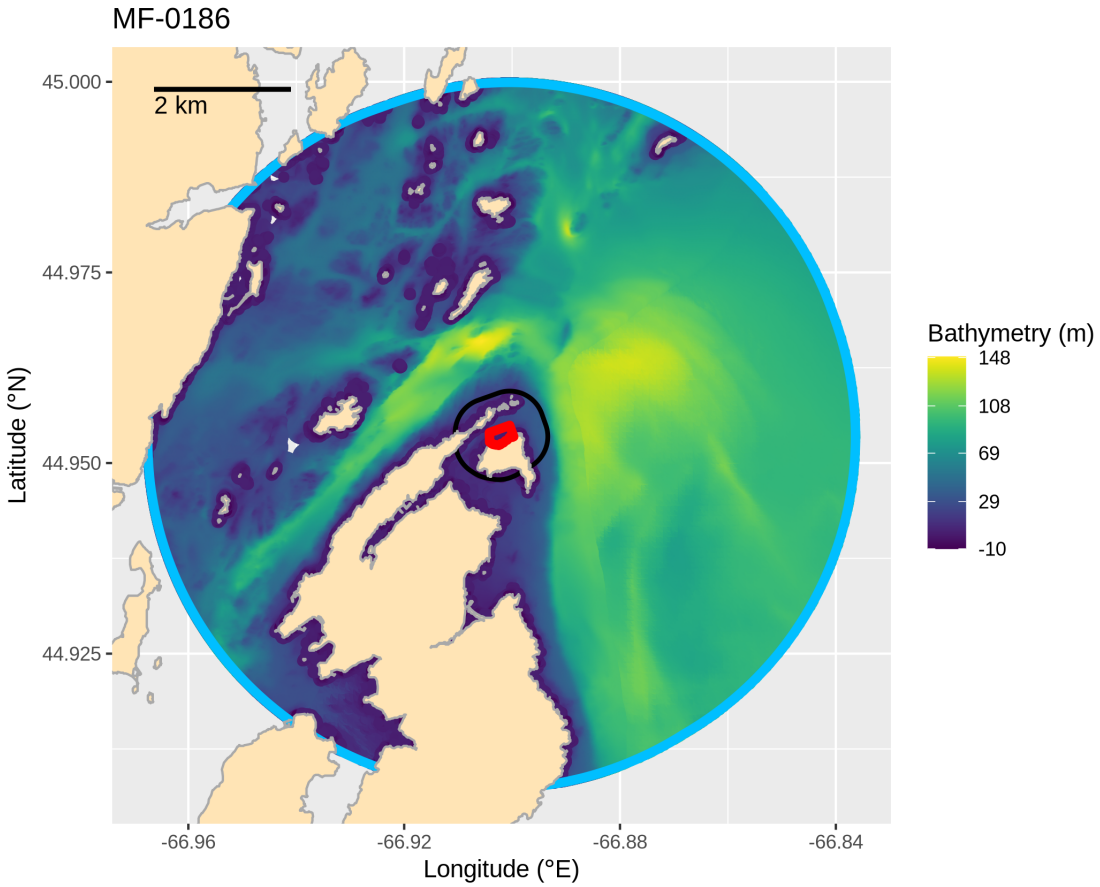


Figure 6.49.2. Farm MF-0186 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.50 Farm MF-0206

The lease centre for farm MF-0206 is 66.9052° W, 44.9454° N and the lease encompasses an area of 67538 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.50.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.50.2. Within the lease boundaries, the bathymetry ranges from 7 m to 14 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 30 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 149 m.

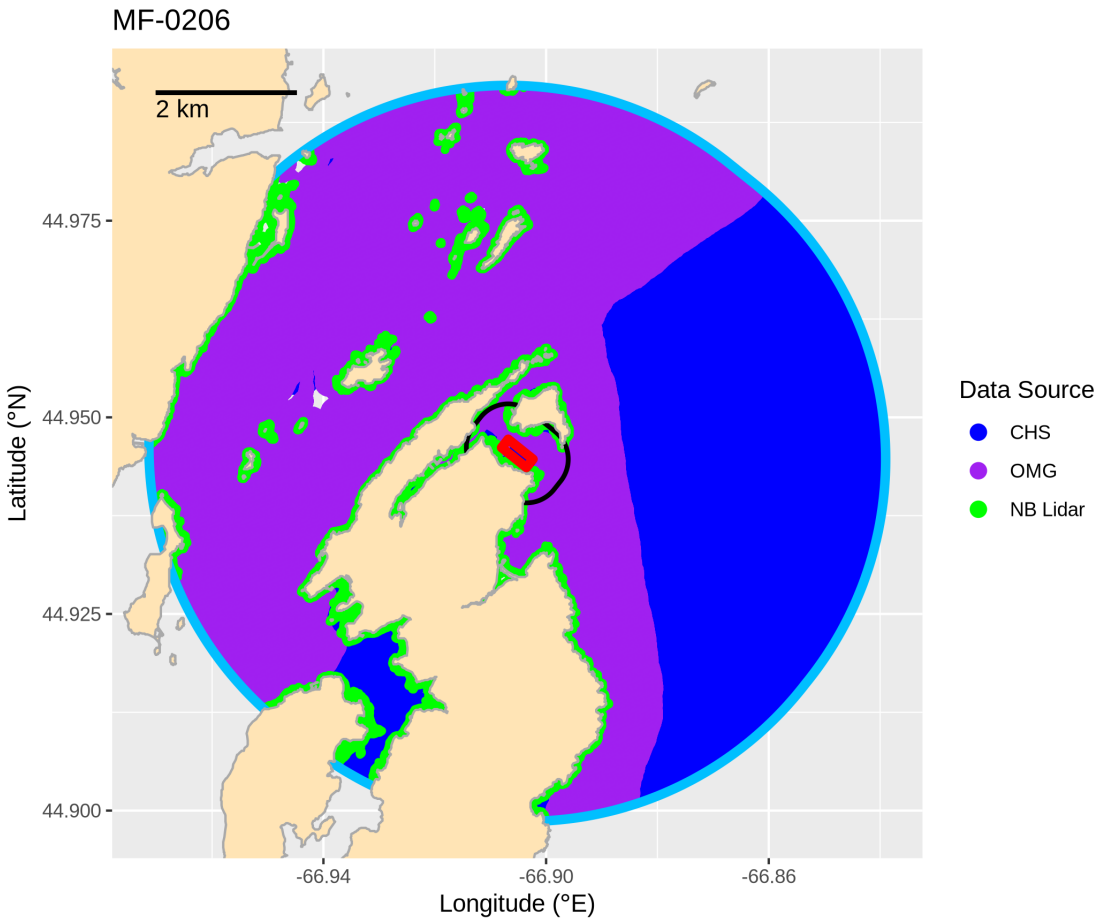


Figure 6.50.1. Farm MF-0206 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

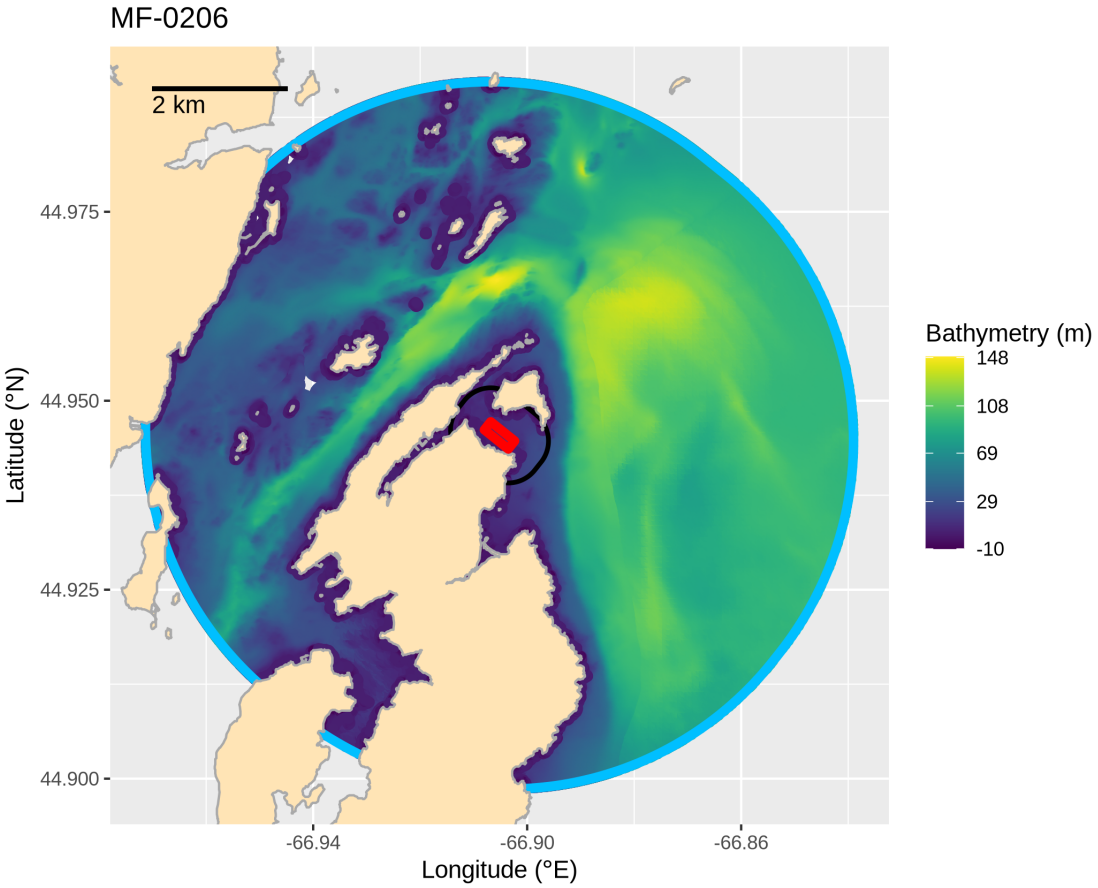


Figure 6.50.2. Farm MF-0206 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.51 Farm MF-0213

The lease centre for farm MF-0213 is 66.7302° W, 44.7342° N and the lease encompasses an area of 219988 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.51.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.51.2. Within the lease boundaries, the bathymetry ranges from -5 m to 19 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 26 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 96 m.

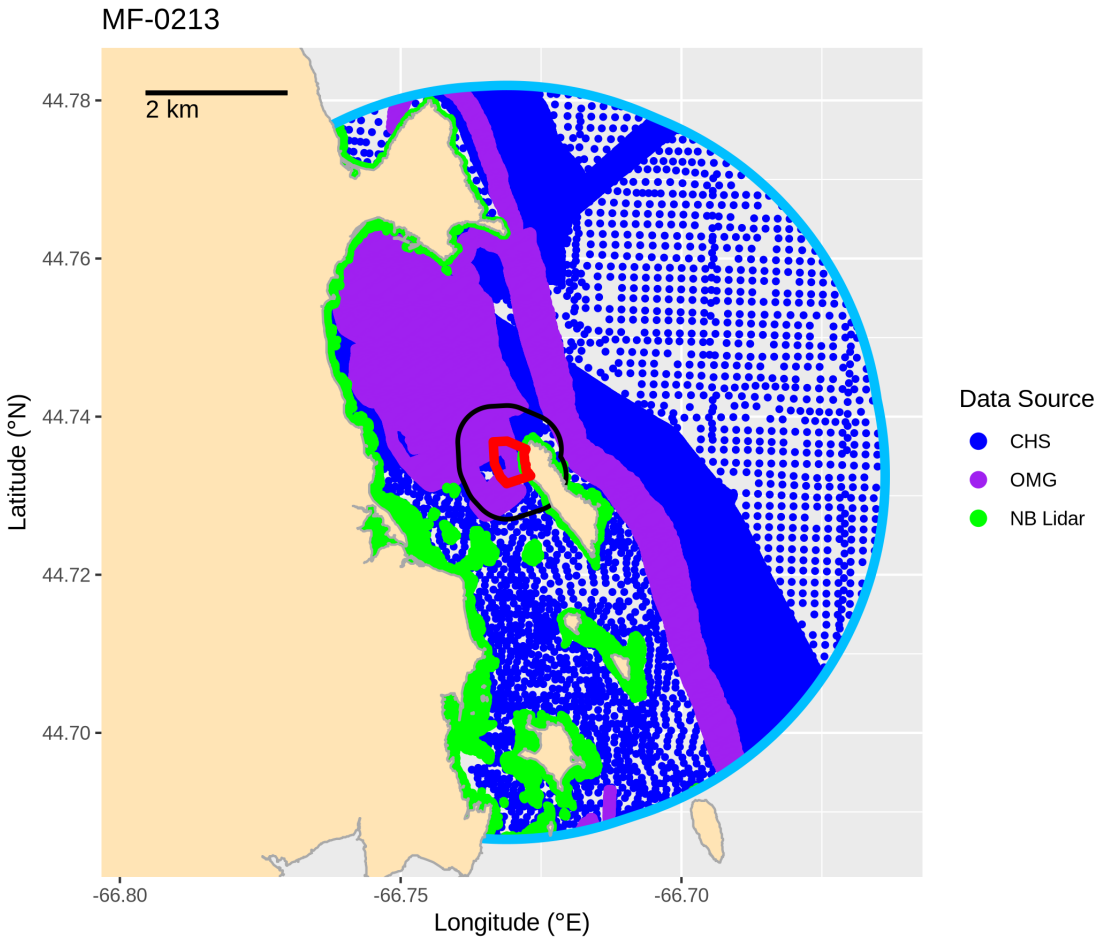


Figure 6.51.1. Farm MF-0213 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

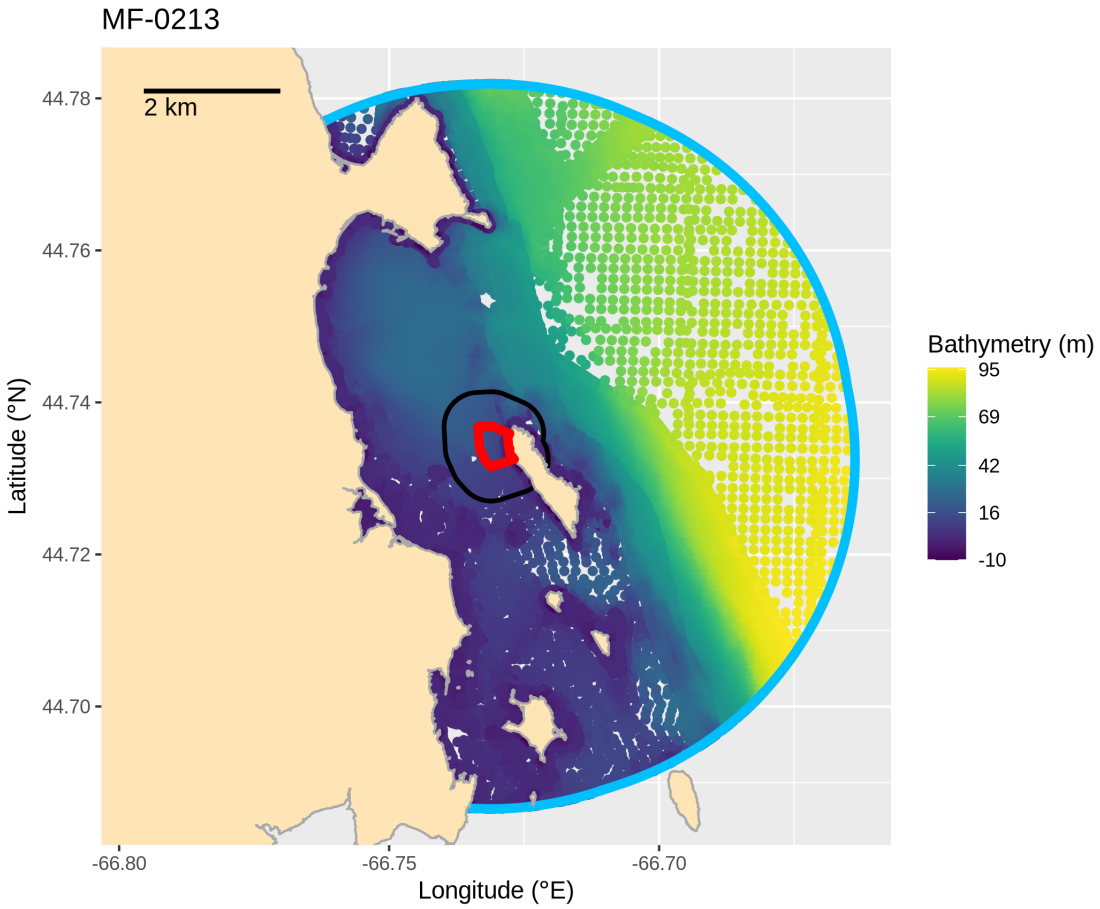


Figure 6.51.2. Farm MF-0213 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.52 Farm MF-0214

The lease centre for farm MF-0214 is 67.0329° W, 45.1142° N and the lease encompasses an area of 199953 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.52.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.52.2. Within the lease boundaries, the bathymetry ranges from 18 m to 23 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 41 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 79 m.

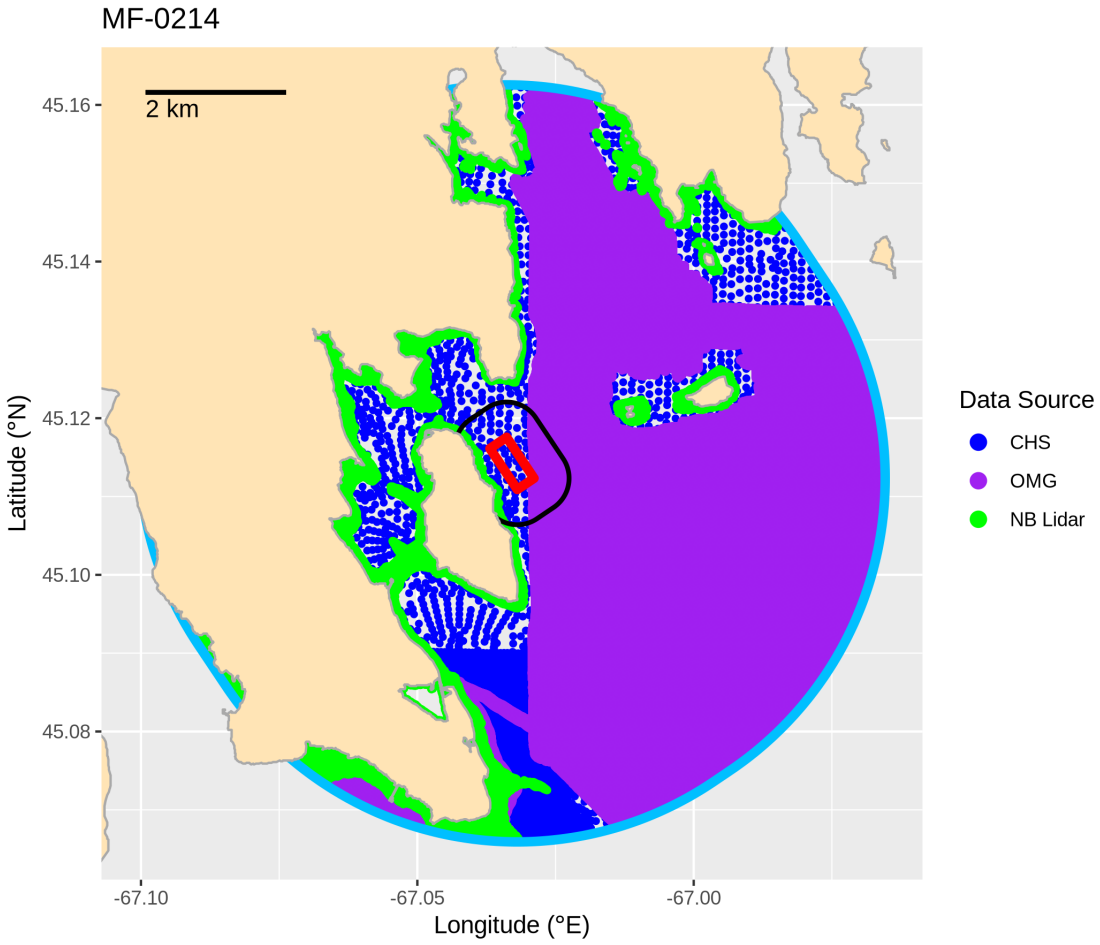


Figure 6.52.1. Farm MF-0214 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

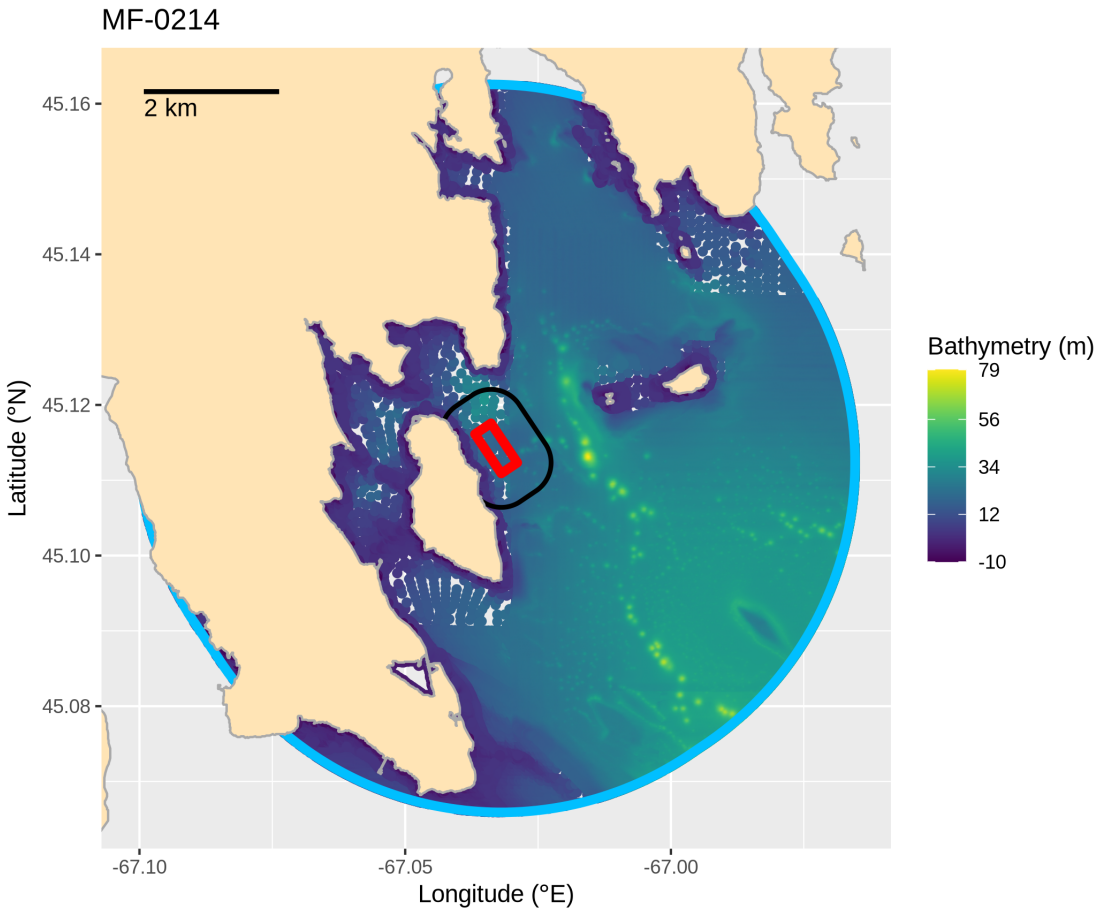


Figure 6.52.2. Farm MF-0214 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.53 Farm MF-0215

The lease centre for farm MF-0215 is 66.9279° W, 45.0085° N and the lease encompasses an area of 86994 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.53.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.53.2. Within the lease boundaries, the bathymetry ranges from 2 m to 34 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 48 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 149 m.

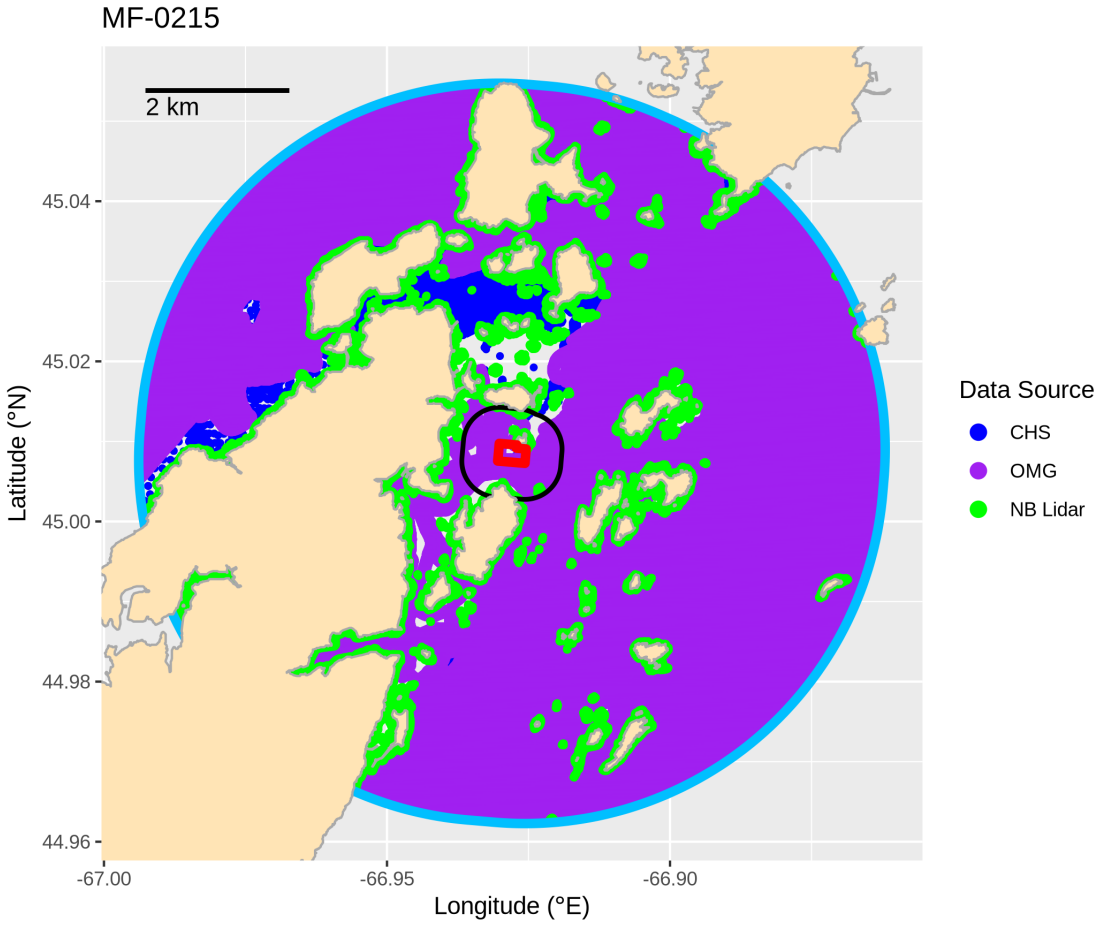


Figure 6.53.1. Farm MF-0215 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

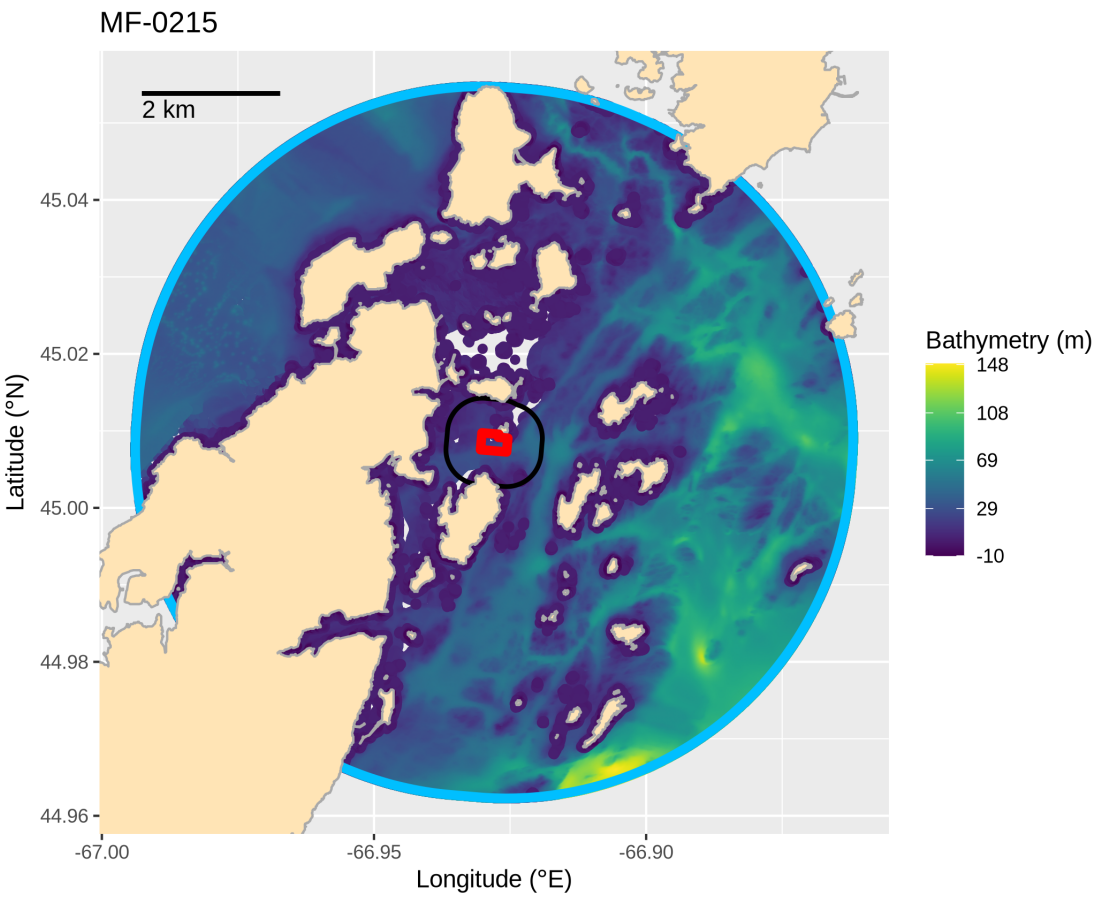


Figure 6.53.2. Farm MF-0215 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.54 Farm MF-0222

The lease centre for farm MF-0222 is 66.9799° W, 45.0102° N and the lease encompasses an area of 306713 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.54.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.54.2. Within the lease boundaries, the bathymetry ranges from -3 m to 39 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 48 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 77 m.

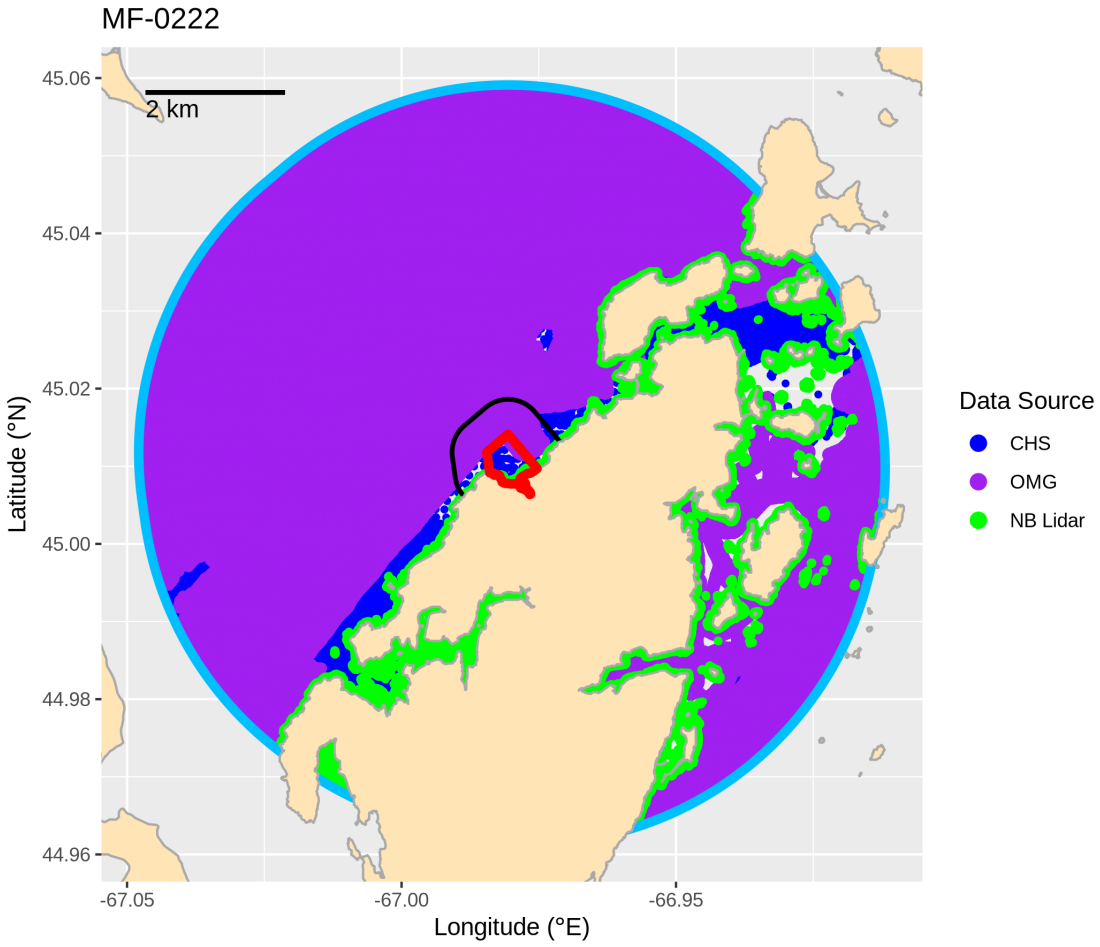


Figure 6.54.1. Farm MF-0222 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

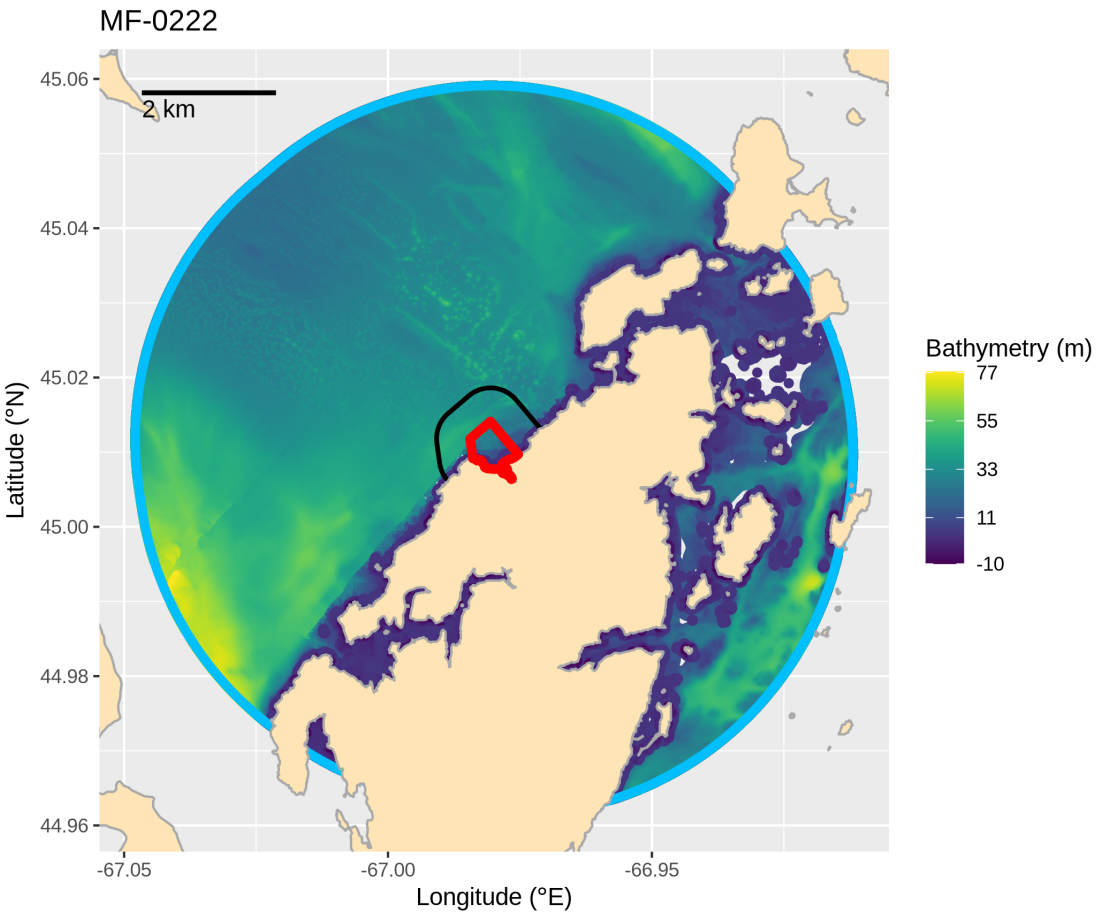


Figure 6.54.2. Farm MF-0222 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.55 Farm MF-0228

The lease centre for farm MF-0228 is 66.9750° W, 45.0165° N and the lease encompasses an area of 193693 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.55.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.55.2. Within the lease boundaries, the bathymetry ranges from 24 m to 48 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 50 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 71 m.

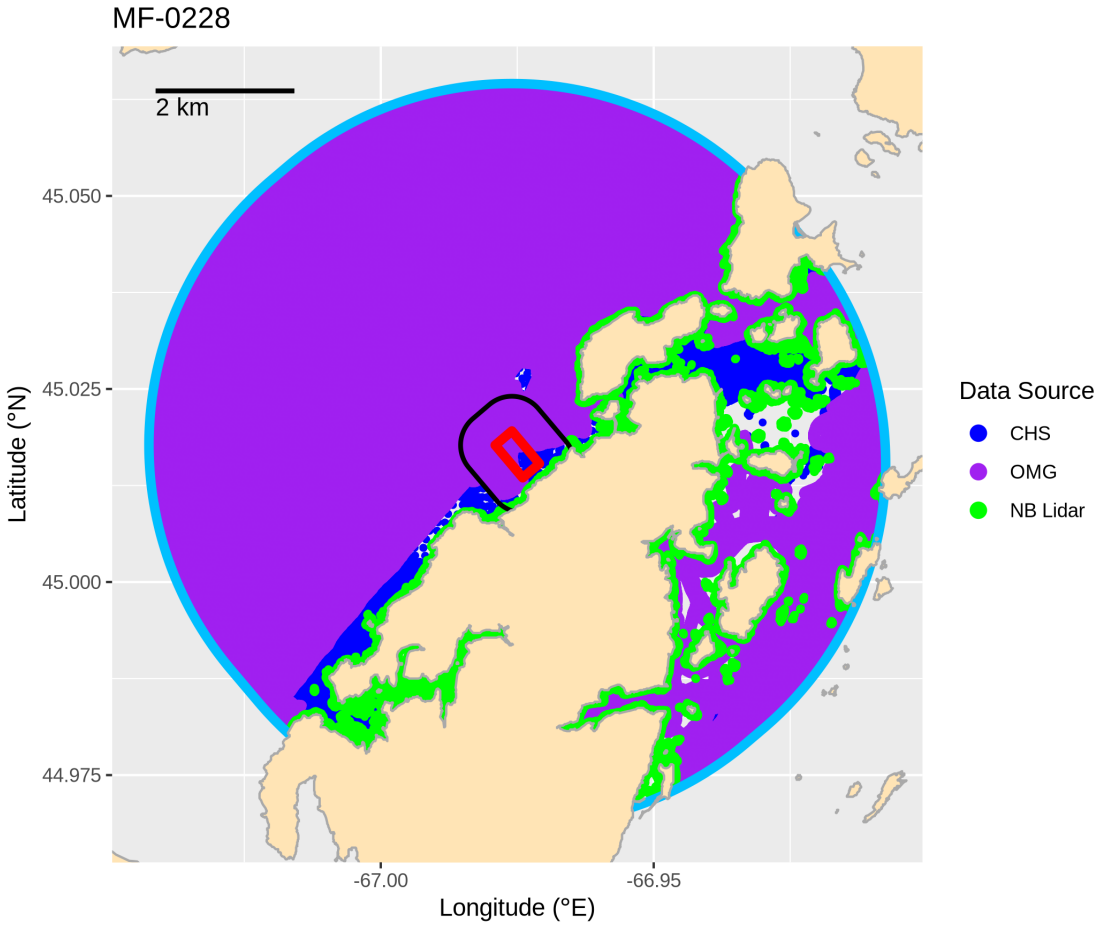


Figure 6.55.1. Farm MF-0228 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

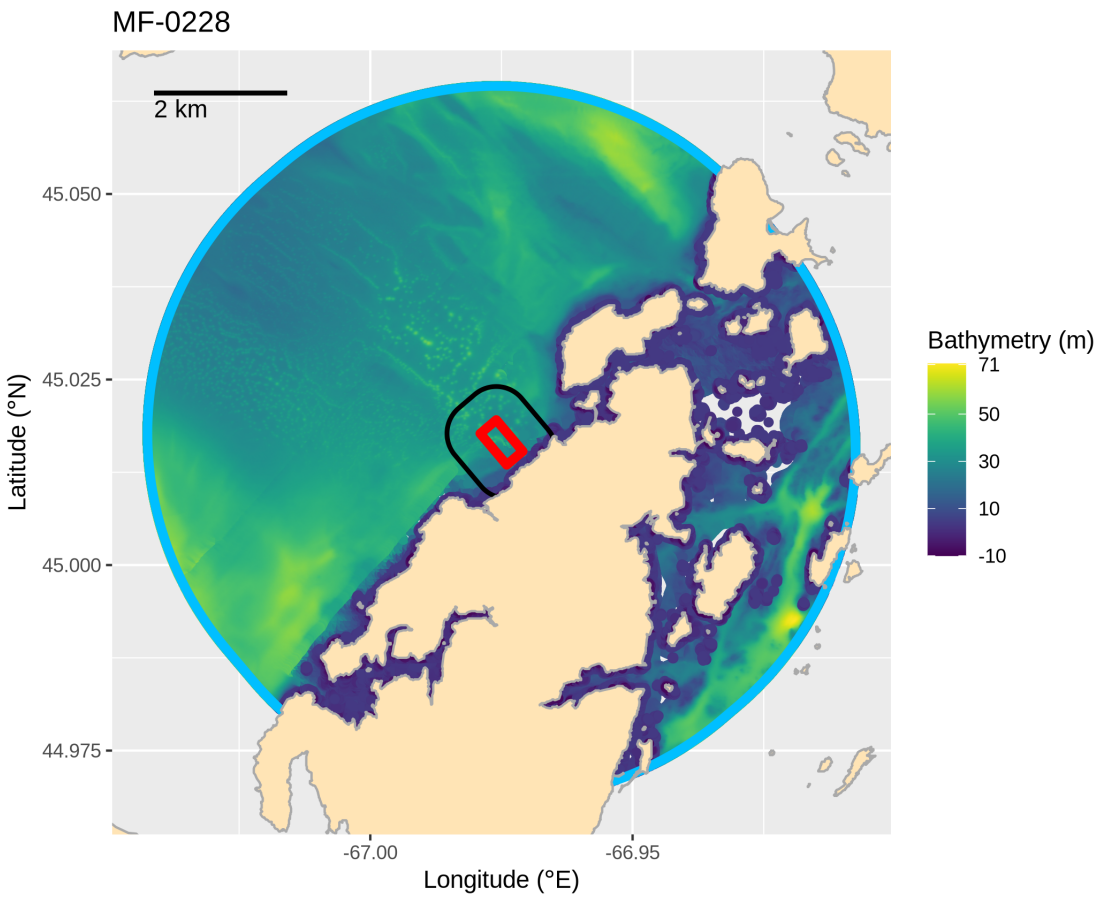


Figure 6.55.2. Farm MF-0228 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.56 Farm MF-0251

The lease centre for farm MF-0251 is 66.9748° W, 45.0283° N and the lease encompasses an area of 349531 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.56.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.56.2. Within the lease boundaries, the bathymetry ranges from 32 m to 52 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from 17 m to 52 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 80 m.

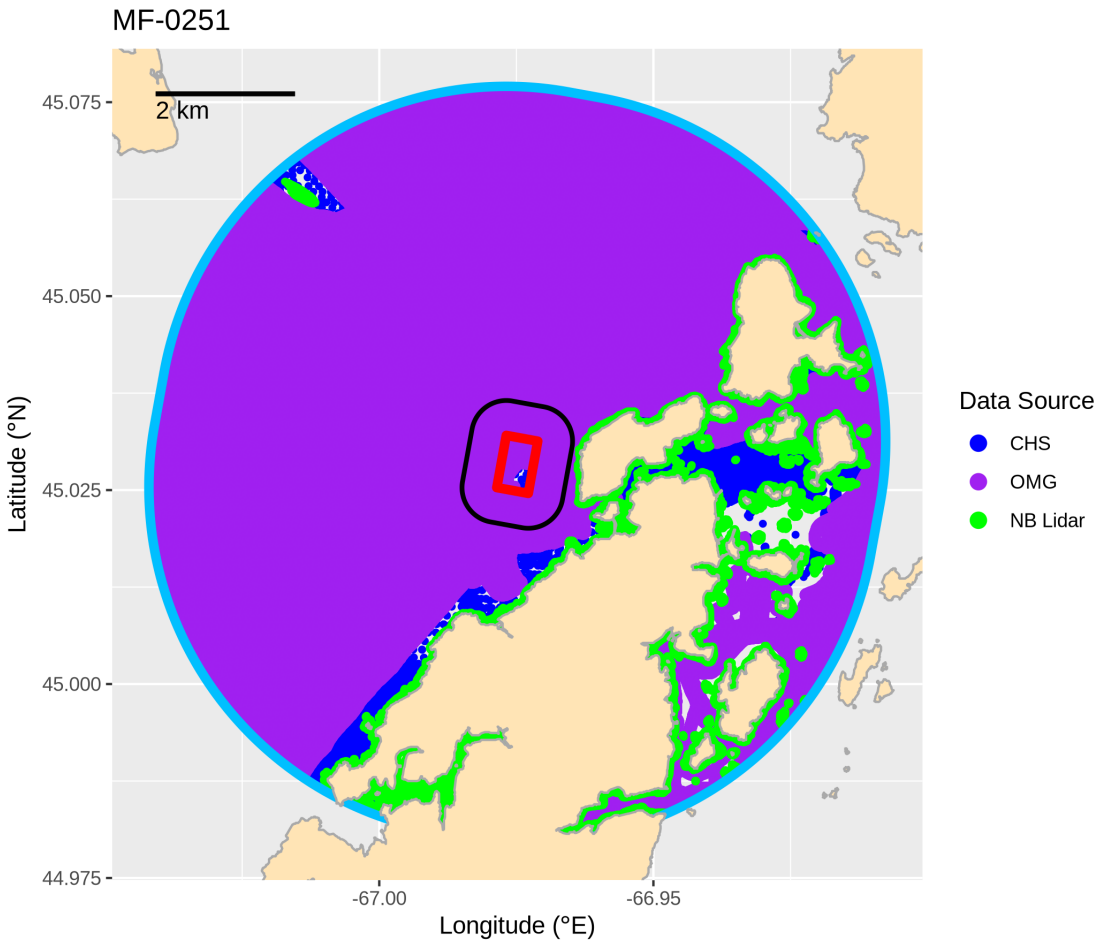


Figure 6.56.1. Farm MF-0251 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

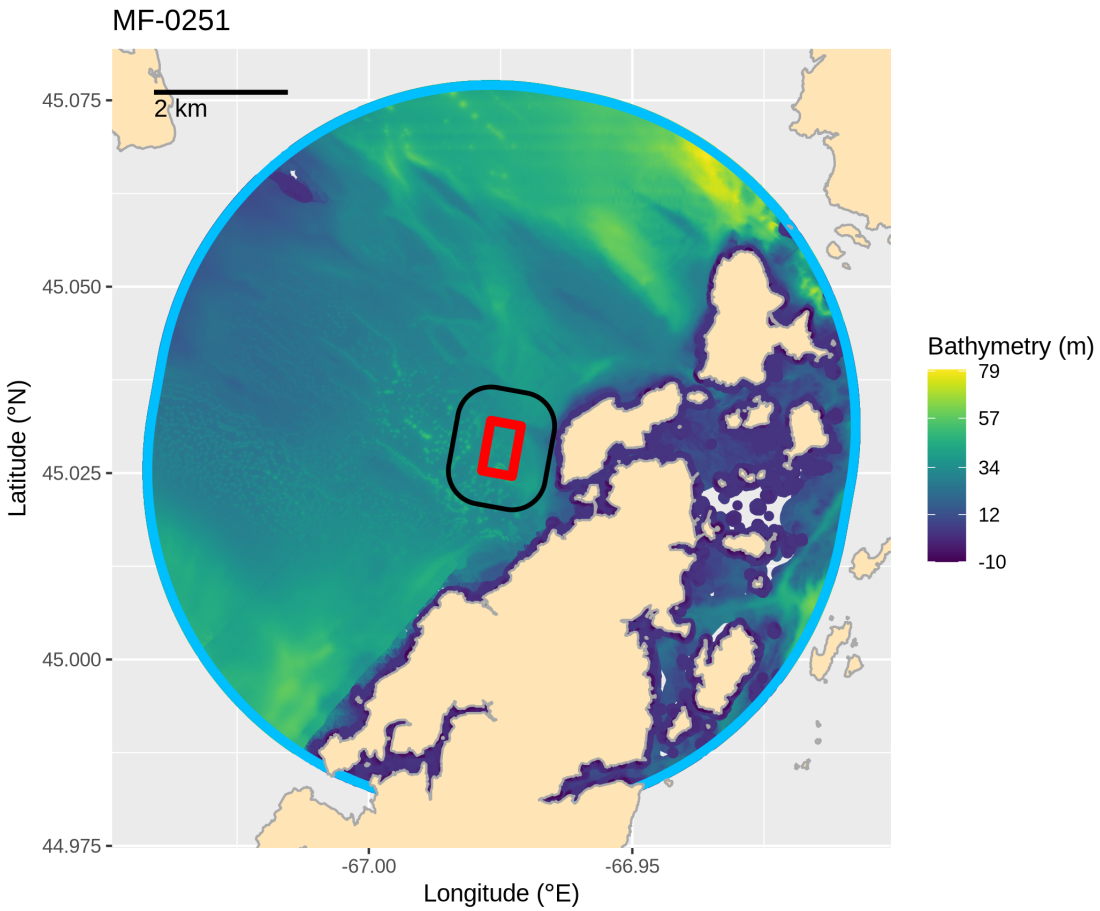


Figure 6.56.2. Farm MF-0251 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.57 Farm MF-0256

The lease centre for farm MF-0256 is 66.9651° W, 45.0384° N and the lease encompasses an area of 269732 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.57.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.57.2. Within the lease boundaries, the bathymetry ranges from 30 m to 41 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -9 m to 45 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 88 m.

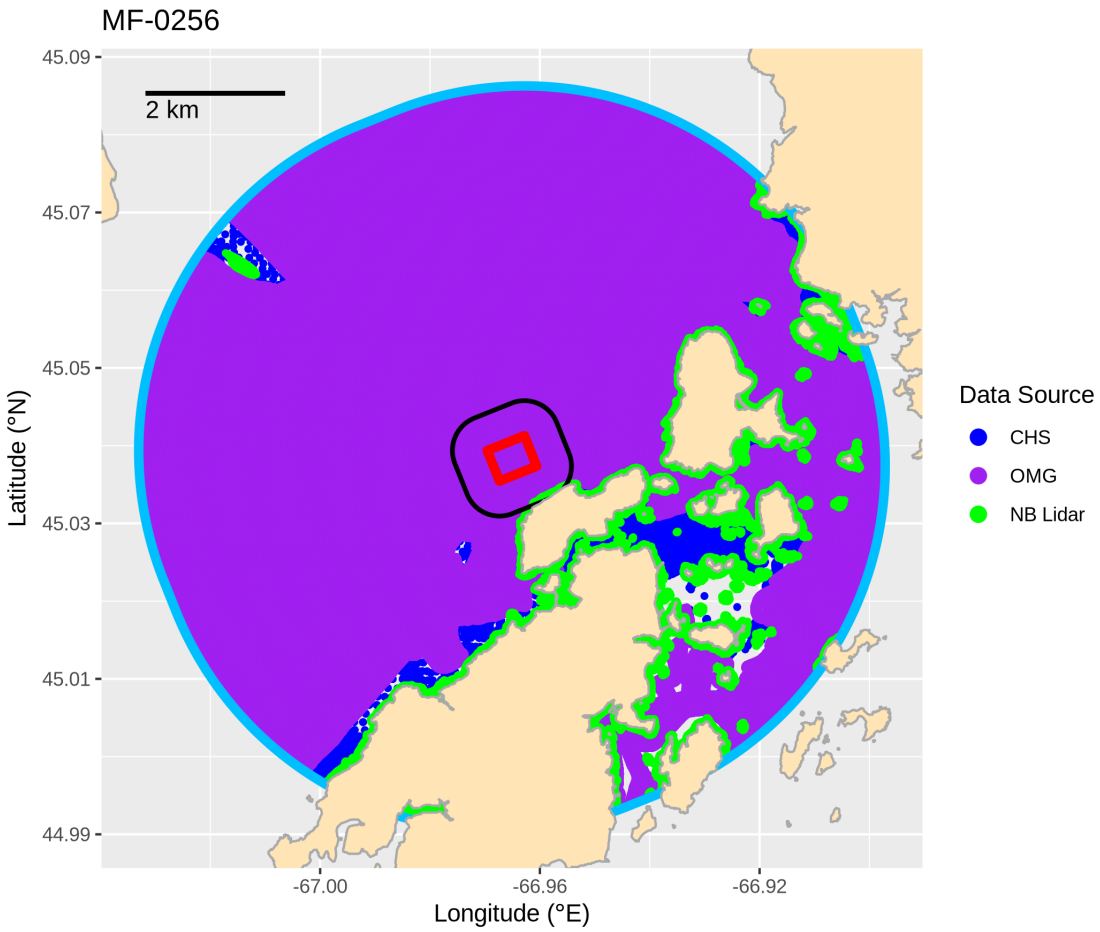


Figure 6.57.1. Farm MF-0256 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

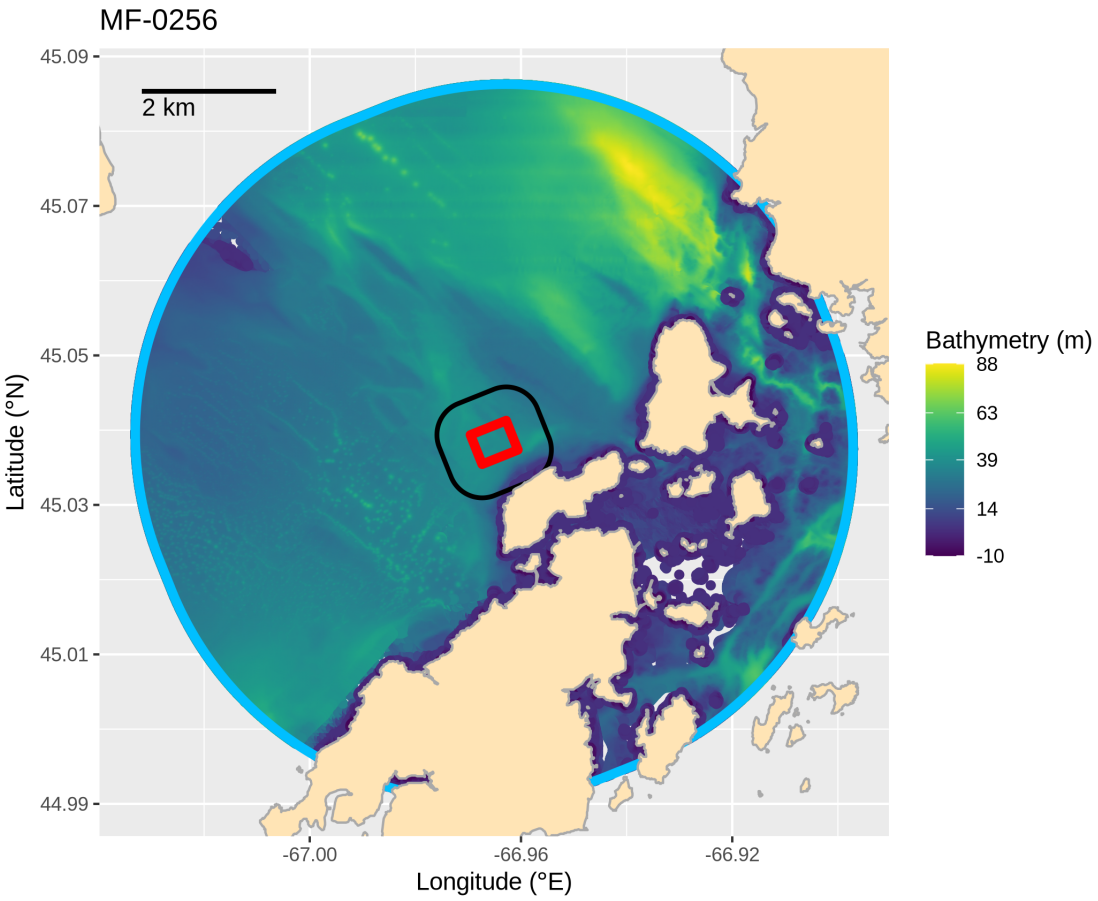


Figure 6.57.2. Farm MF-0256 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.58 Farm MF-0270

The lease centre for farm MF-0270 is 66.8406° W, 44.6180° N and the lease encompasses an area of 360248 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.58.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.58.2. Within the lease boundaries, the bathymetry ranges from 5 m to 18 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 21 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 47 m.

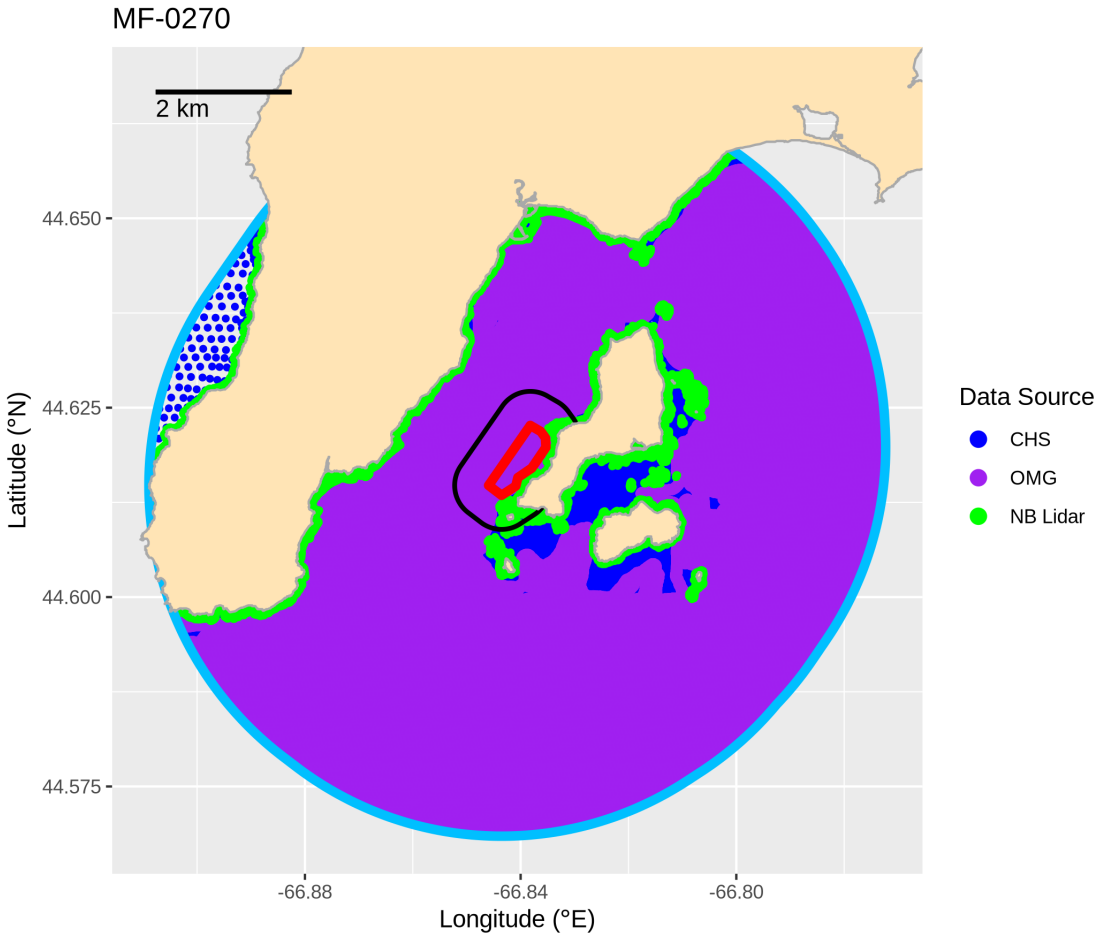


Figure 6.58.1. Farm MF-0270 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

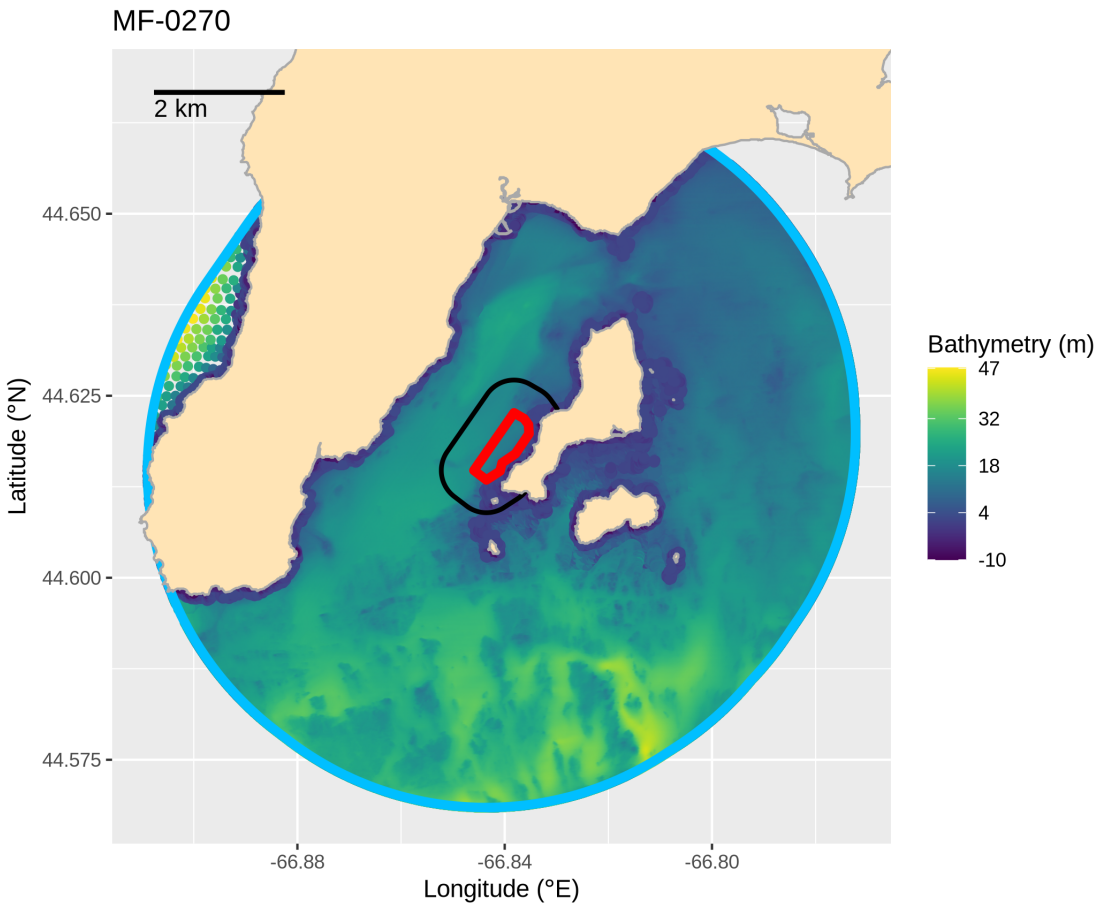


Figure 6.58.2. Farm MF-0270 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.59 Farm MF-0276

The lease centre for farm MF-0276 is 66.8664° W, 45.0293° N and the lease encompasses an area of 161964 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.59.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.59.2. Within the lease boundaries, the bathymetry ranges from -1 m to 51 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 68 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 135 m.

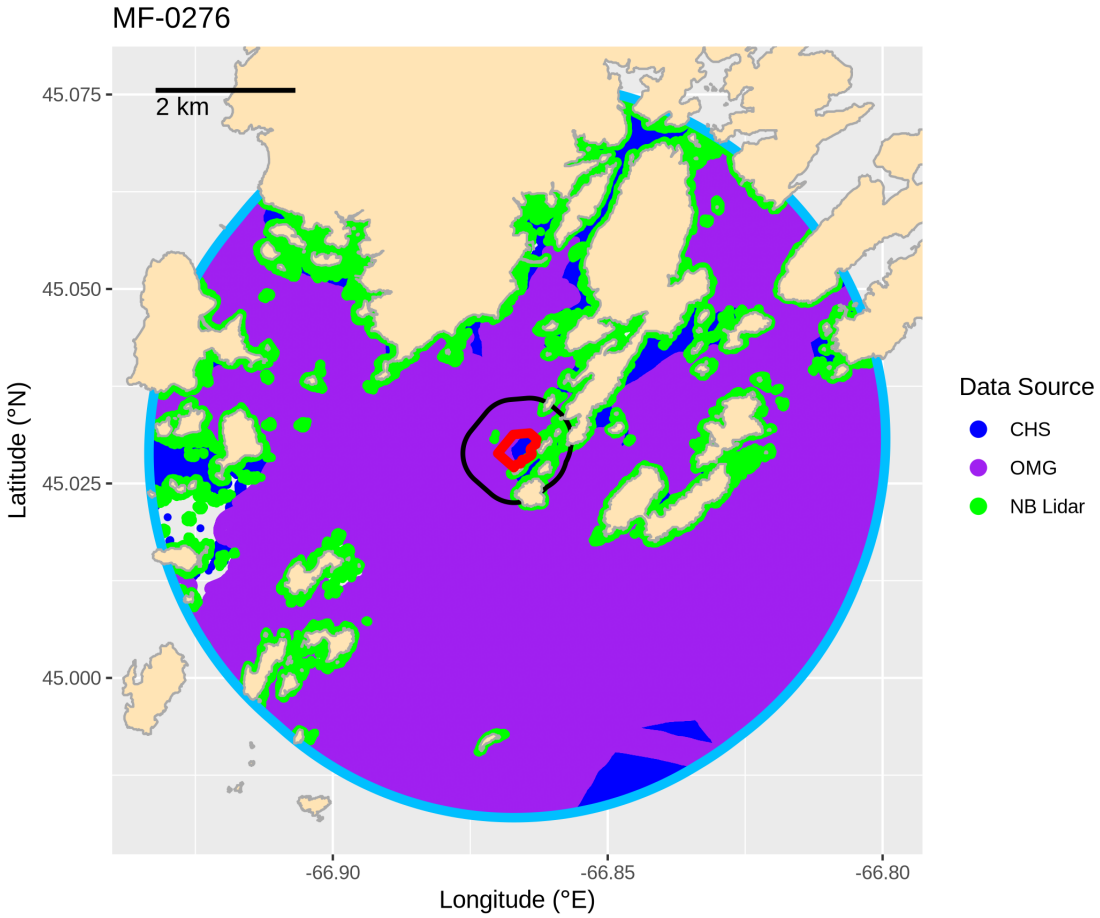


Figure 6.59.1. Farm MF-0276 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

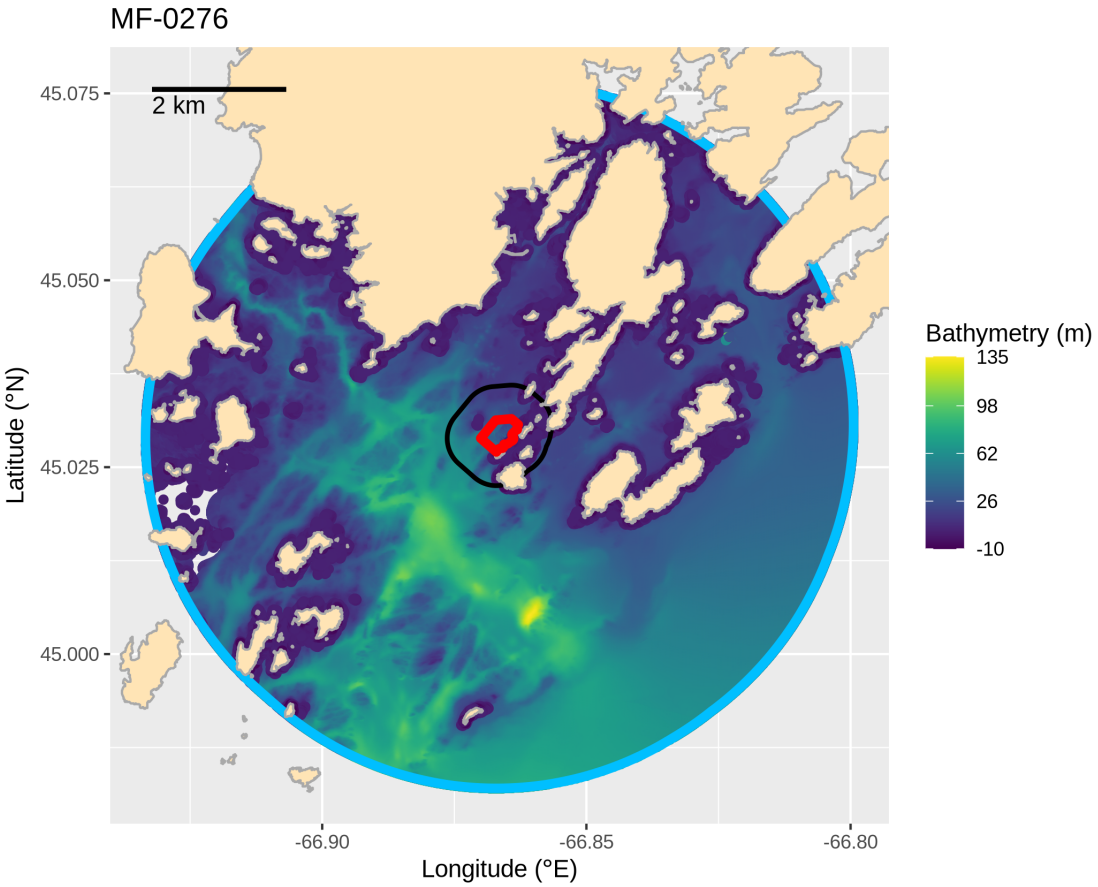


Figure 6.59.2. Farm MF-0276 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.60 Farm MF-0282

The lease centre for farm MF-0282 is 66.7135° W, 44.6893° N and the lease encompasses an area of 231213 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.60.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.60.2. Within the lease boundaries, the bathymetry ranges from 9 m to 12 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -7 m to 13 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 114 m.

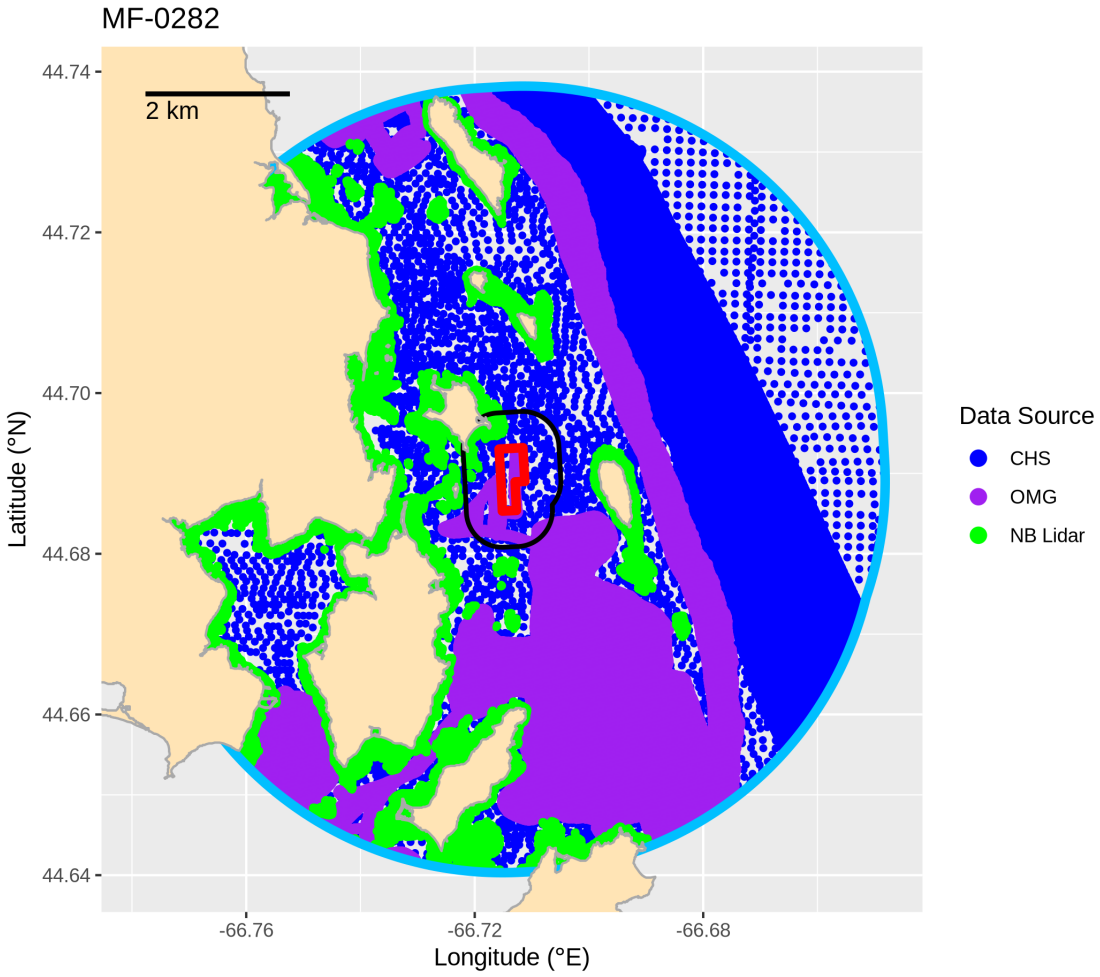


Figure 6.60.1. Farm MF-0282 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

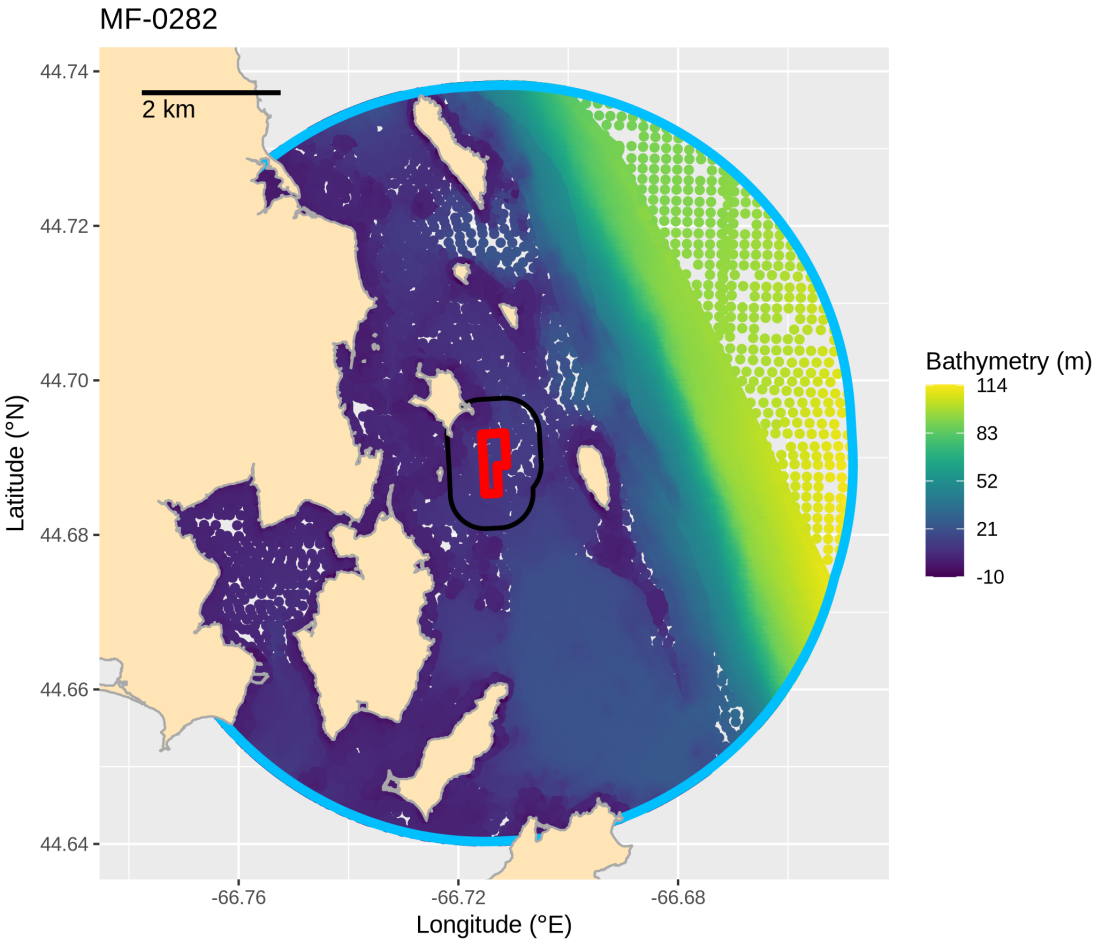


Figure 6.60.2. Farm MF-0282 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.61 Farm MF-0290

The lease centre for farm MF-0290 is 67.0361° W, 45.0938° N and the lease encompasses an area of 129743 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.61.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.61.2. Within the lease boundaries, the bathymetry ranges from 18 m to 20 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 28 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 79 m.

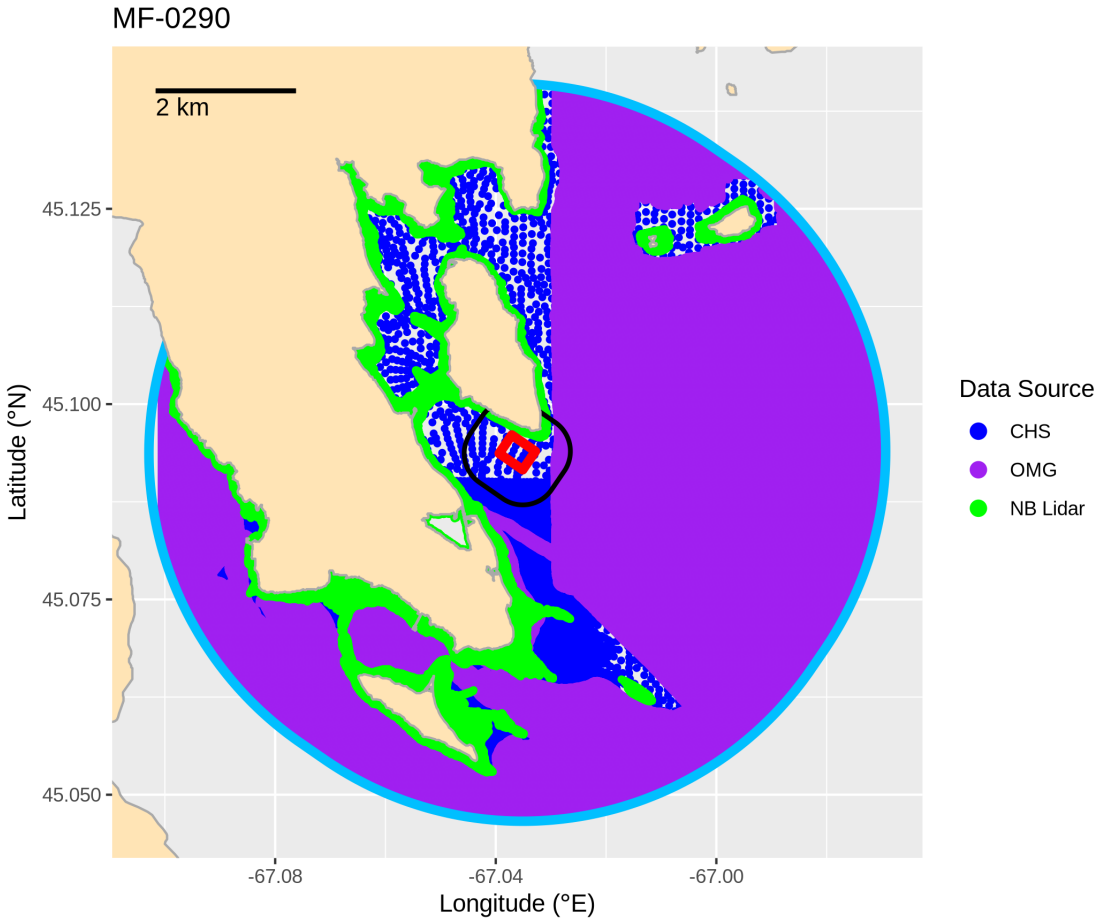


Figure 6.61.1. Farm MF-0290 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

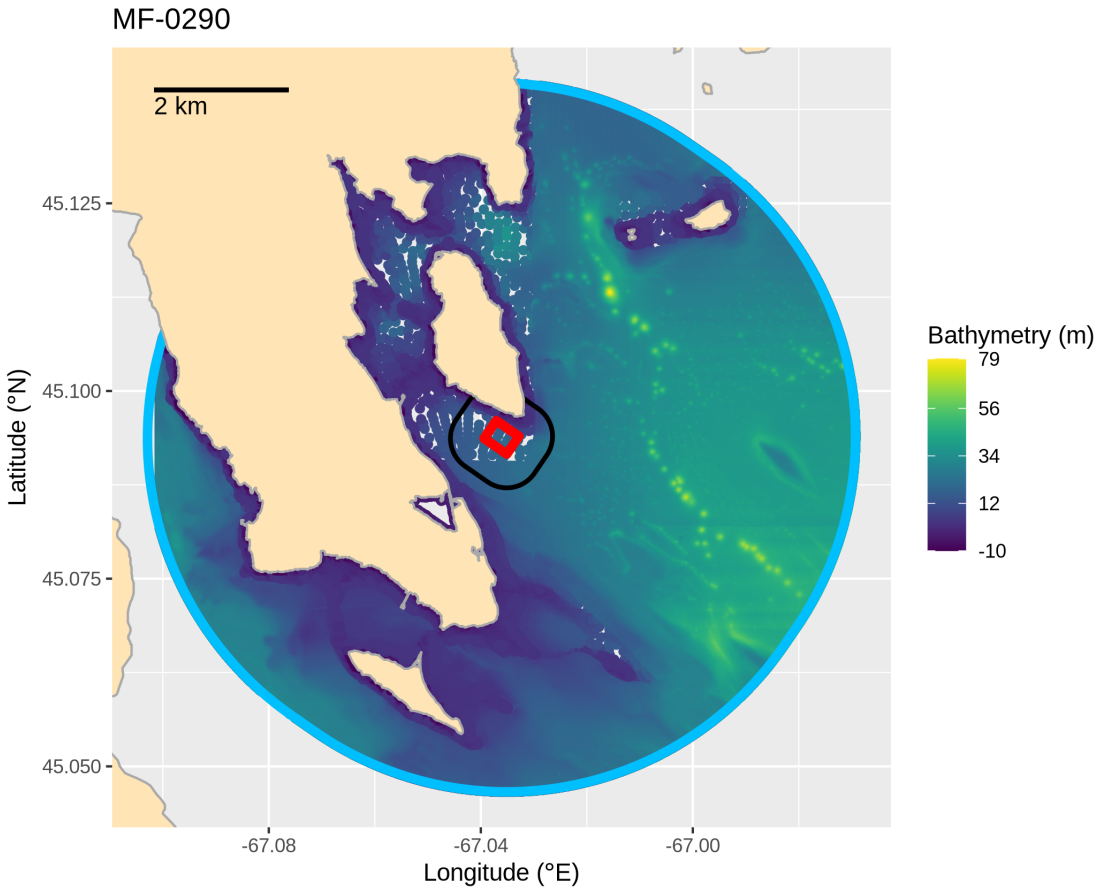


Figure 6.61.2. Farm MF-0290 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.62 Farm MF-0292

The lease centre for farm MF-0292 is 66.8417° W, 44.6397° N and the lease encompasses an area of 328880 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.62.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.62.2. Within the lease boundaries, the bathymetry ranges from 9 m to 22 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 25 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 73 m.

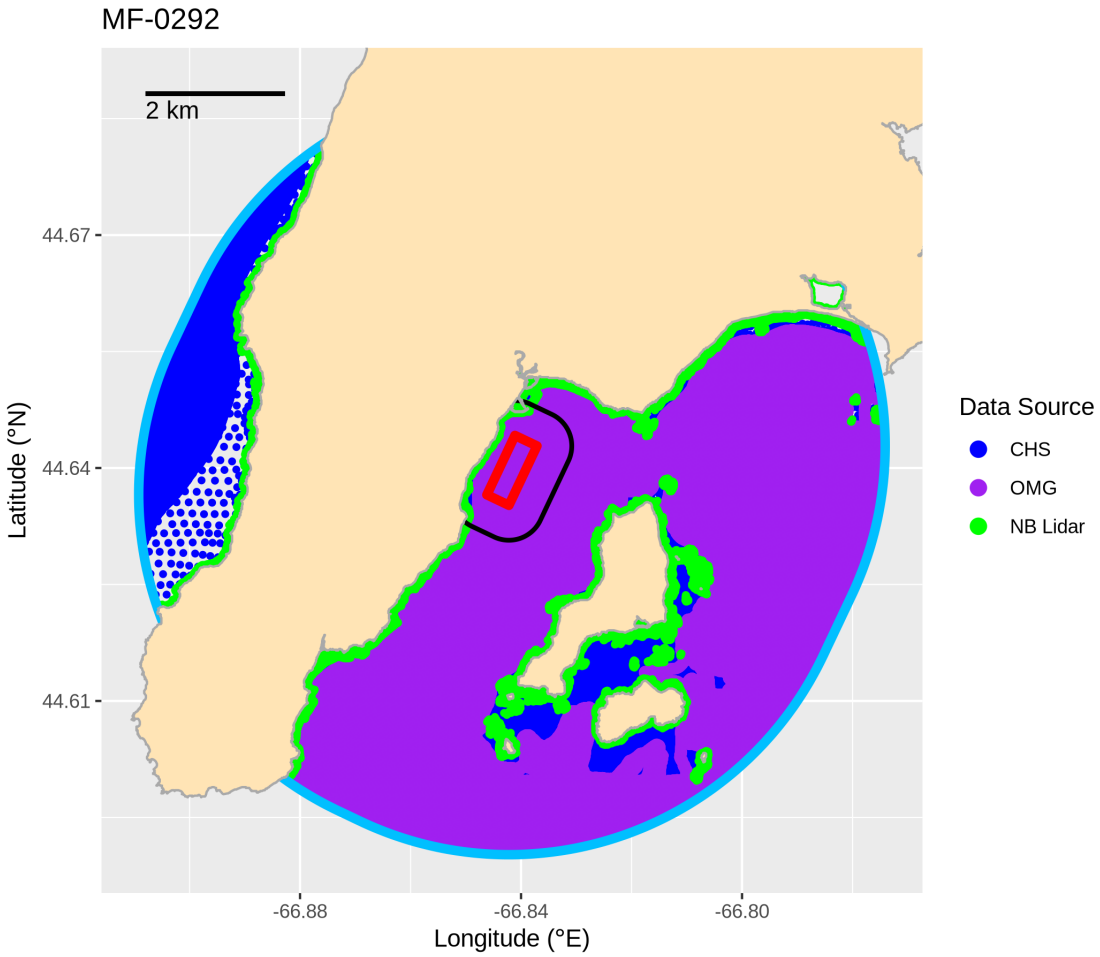


Figure 6.62.1. Farm MF-0292 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

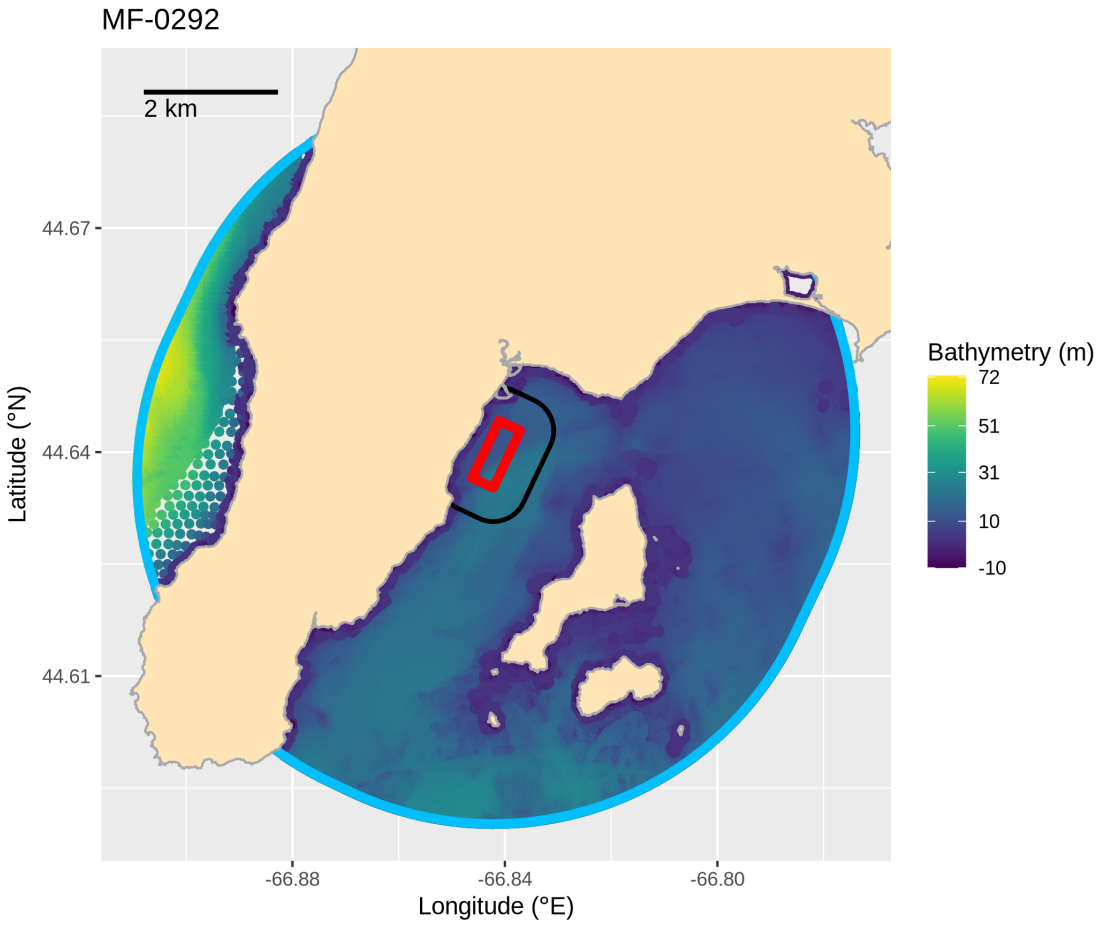


Figure 6.62.2. Farm MF-0292 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.63 Farm MF-0298

The lease centre for farm MF-0298 is 66.6993° W, 44.6821° N and the lease encompasses an area of 174663 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.63.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.63.2. Within the lease boundaries, the bathymetry ranges from 10 m to 14 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 20 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 125 m.

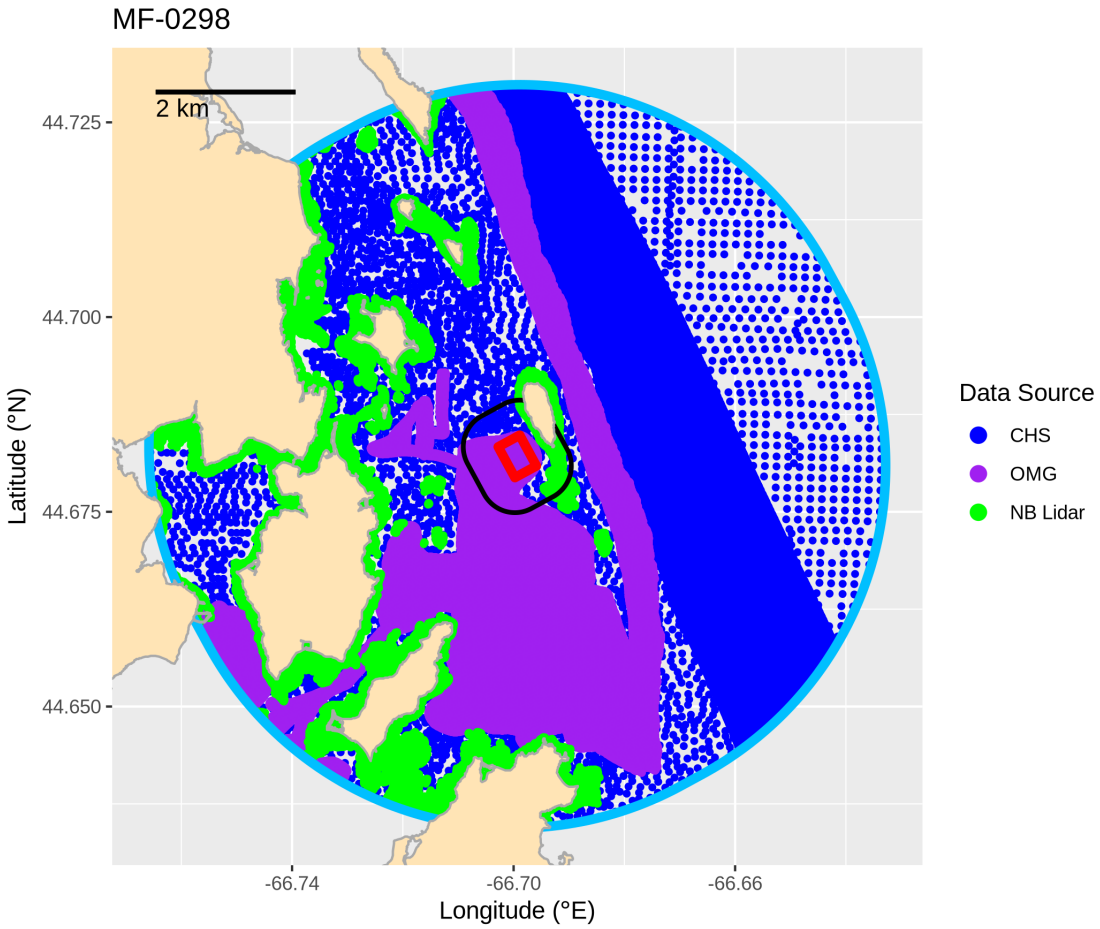


Figure 6.63.1. Farm MF-0298 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

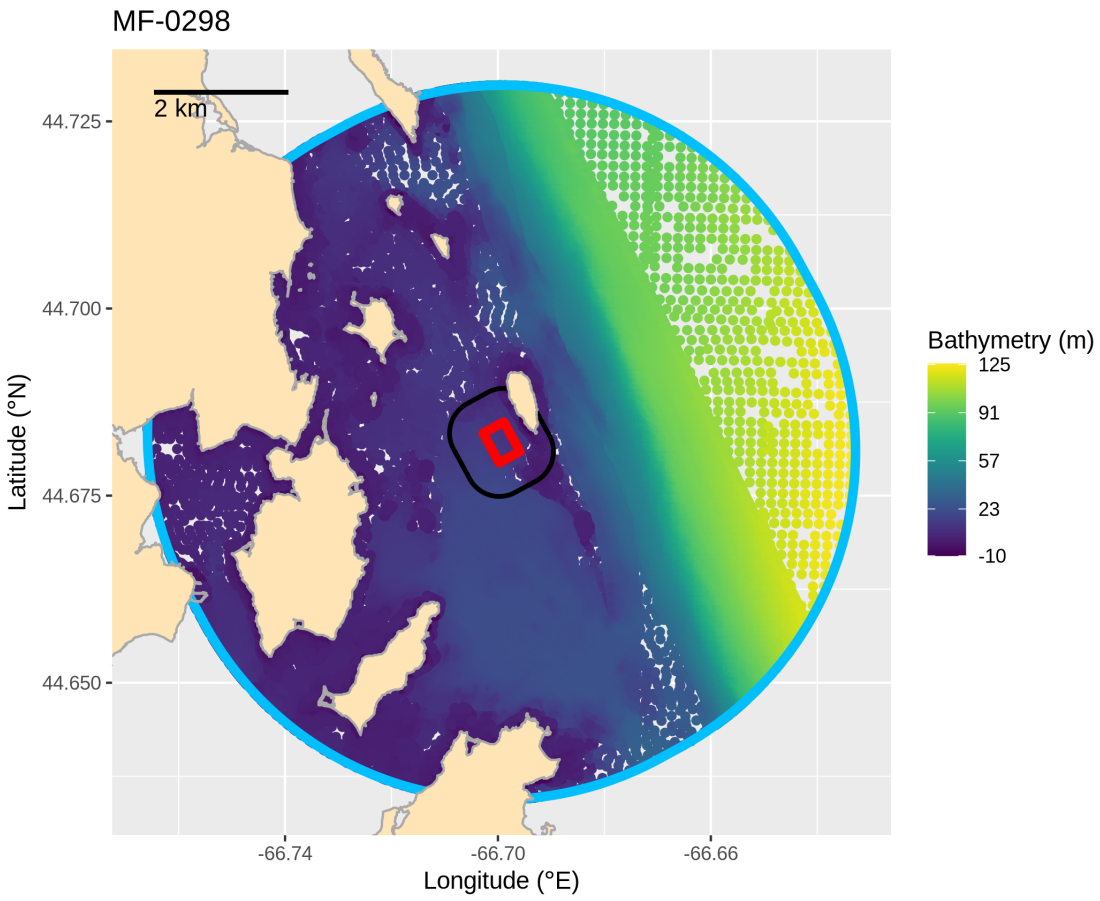


Figure 6.63.2. Farm MF-0298 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.64 Farm MF-0300

The lease centre for farm MF-0300 is 66.7116° W, 44.6759° N and the lease encompasses an area of 168032 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.64.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.64.2. Within the lease boundaries, the bathymetry ranges from 2 m to 16 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -2 m to 20 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 116 m.

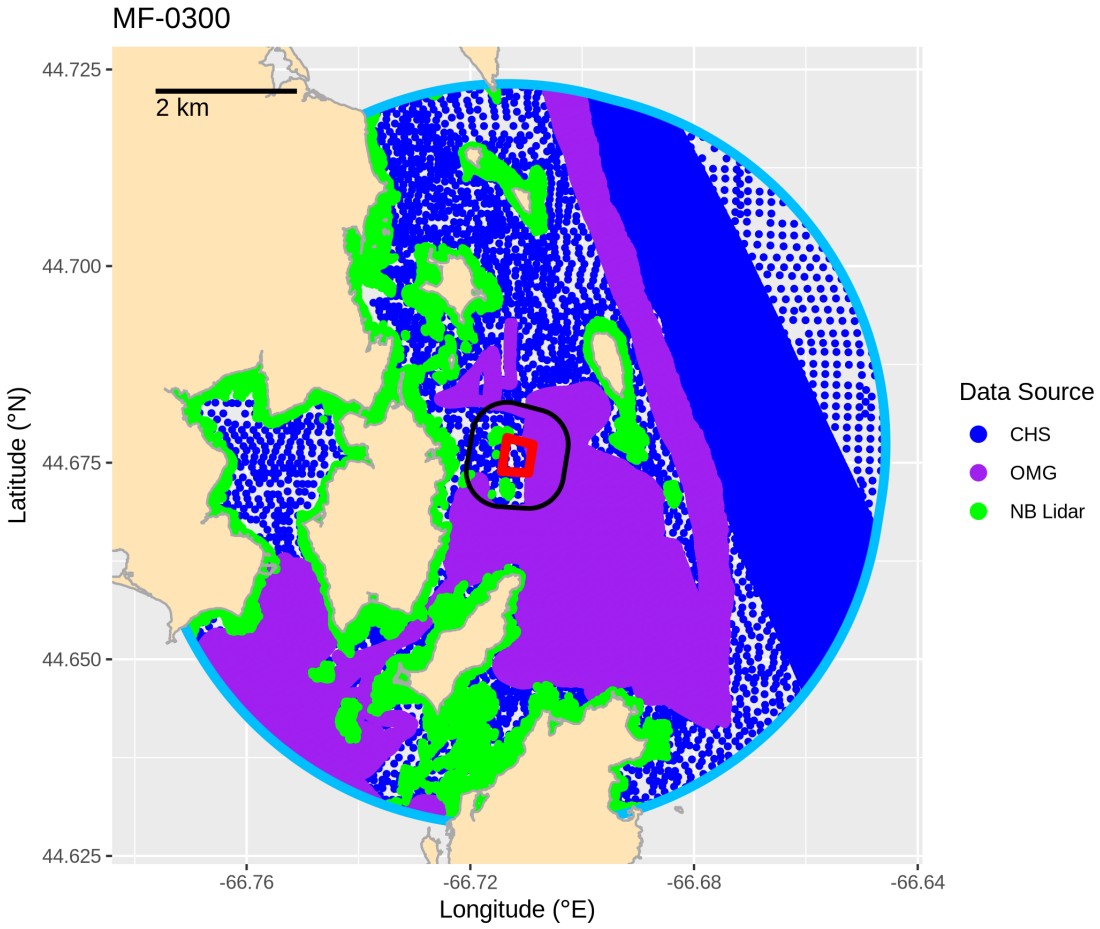


Figure 6.64.1. Farm MF-0300 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

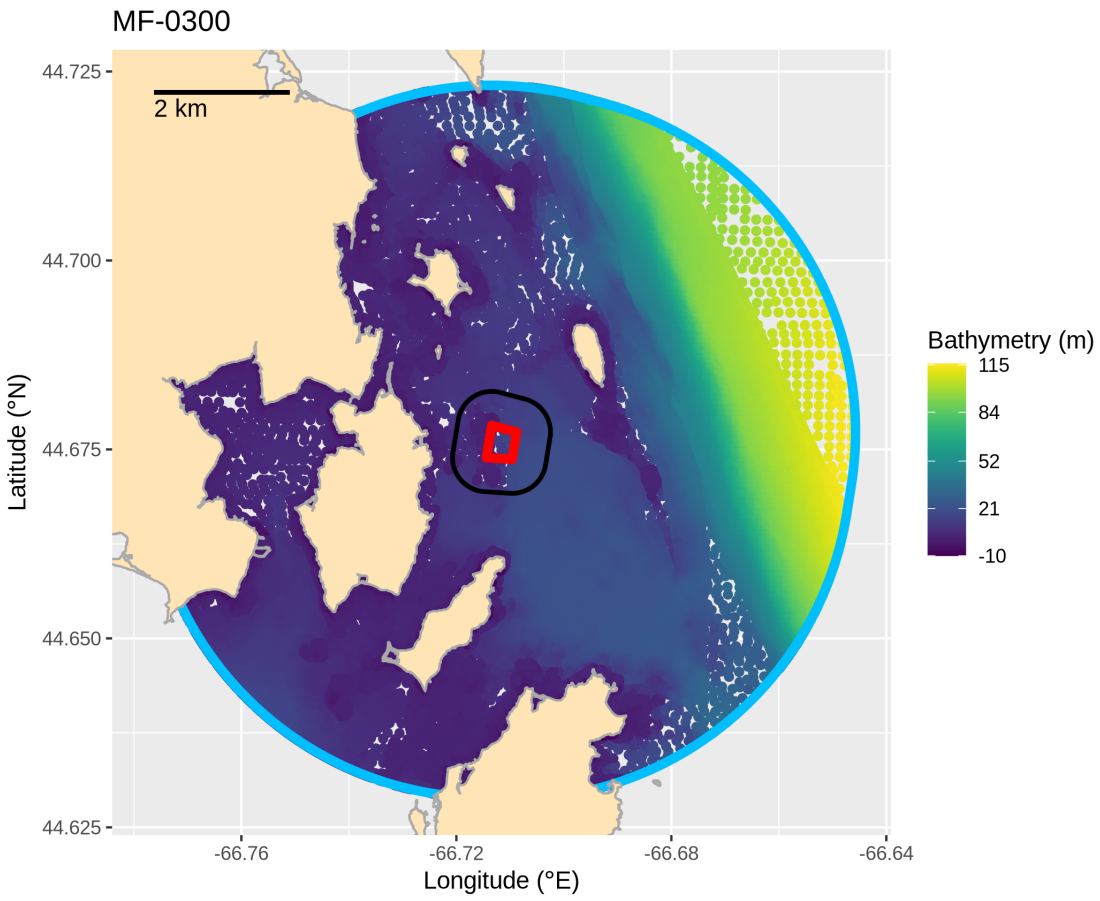


Figure 6.64.2. Farm MF-0300 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.65 Farm MF-0303

The lease centre for farm MF-0303 is 66.7970° W, 44.6460° N and the lease encompasses an area of 198232 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.65.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.65.2. Within the lease boundaries, the bathymetry ranges from 11 m to 12 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from 7 m to 13 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 42 m.

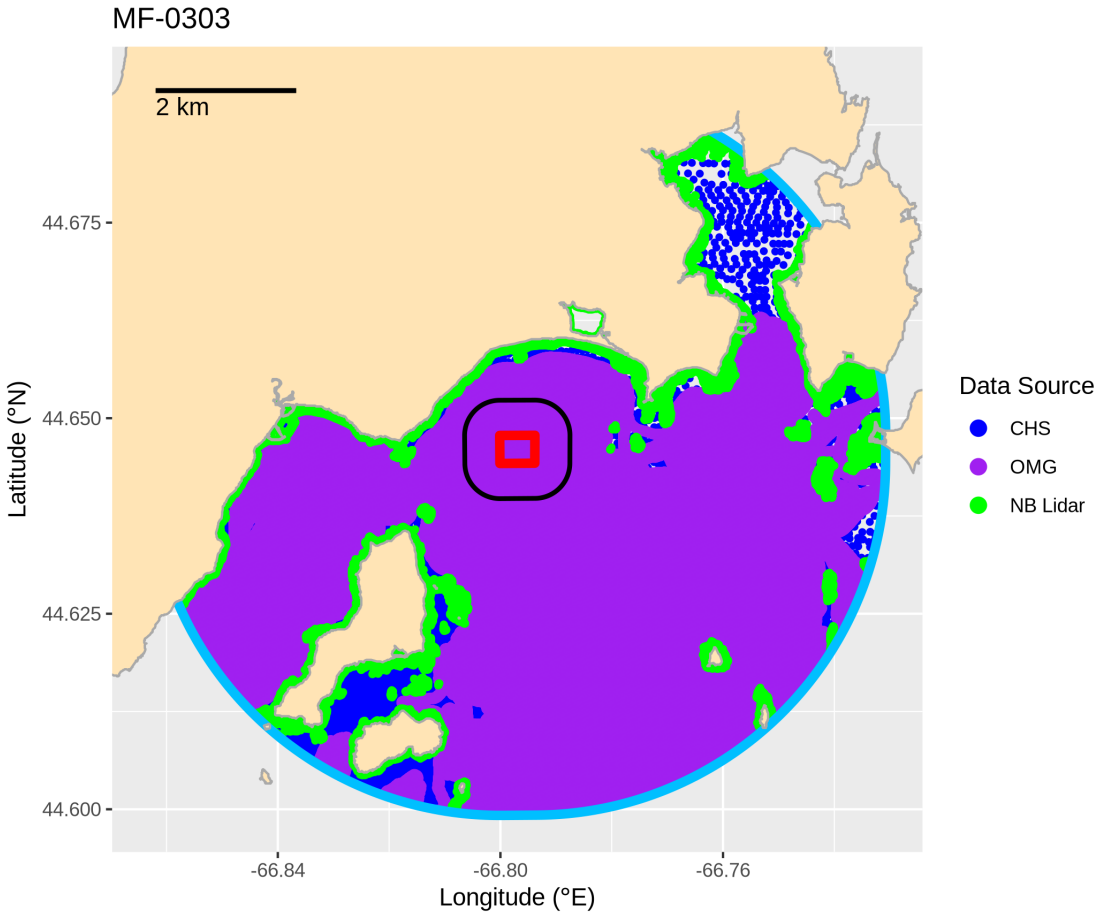


Figure 6.65.1. Farm MF-0303 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

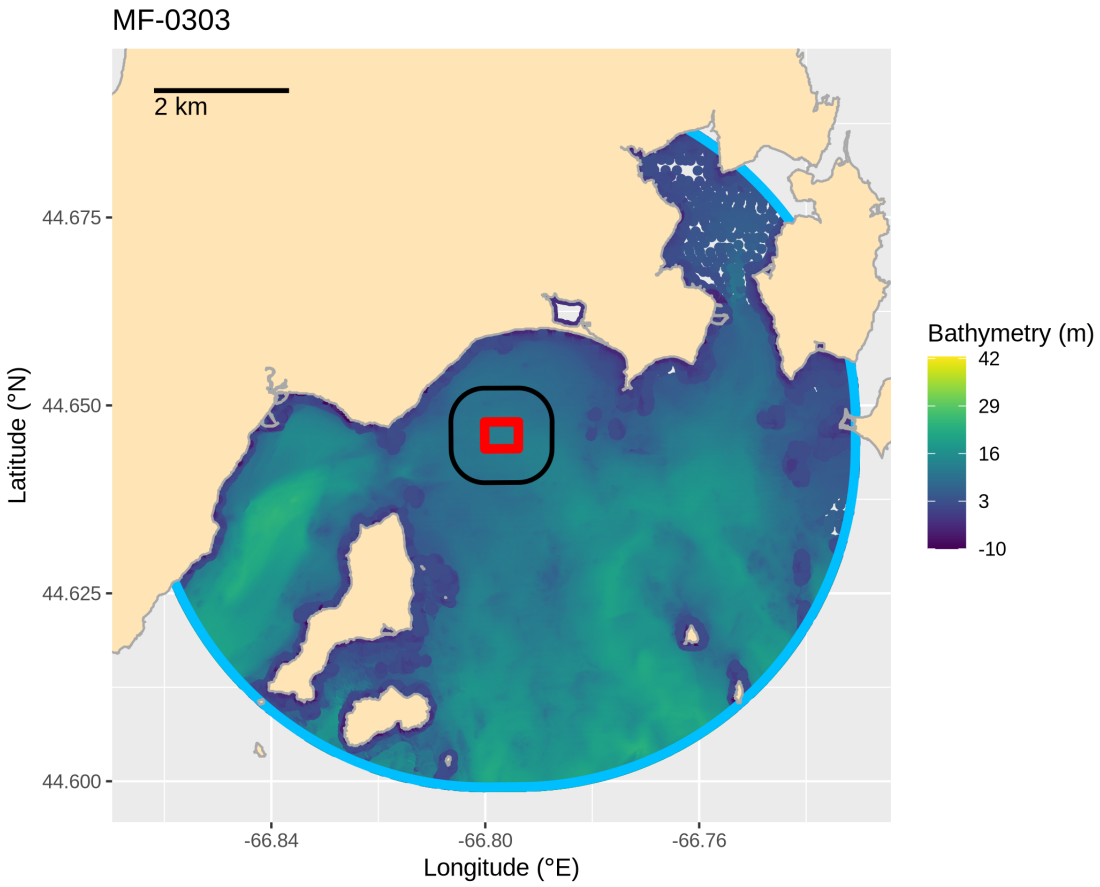


Figure 6.65.2. Farm MF-0303 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.66 Farm MF-0316

The lease centre for farm MF-0316 is 66.7383° W, 44.6224° N and the lease encompasses an area of 260095 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.66.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.66.2. Within the lease boundaries, the bathymetry ranges from 0 m to 19 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -6 m to 22 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 47 m.

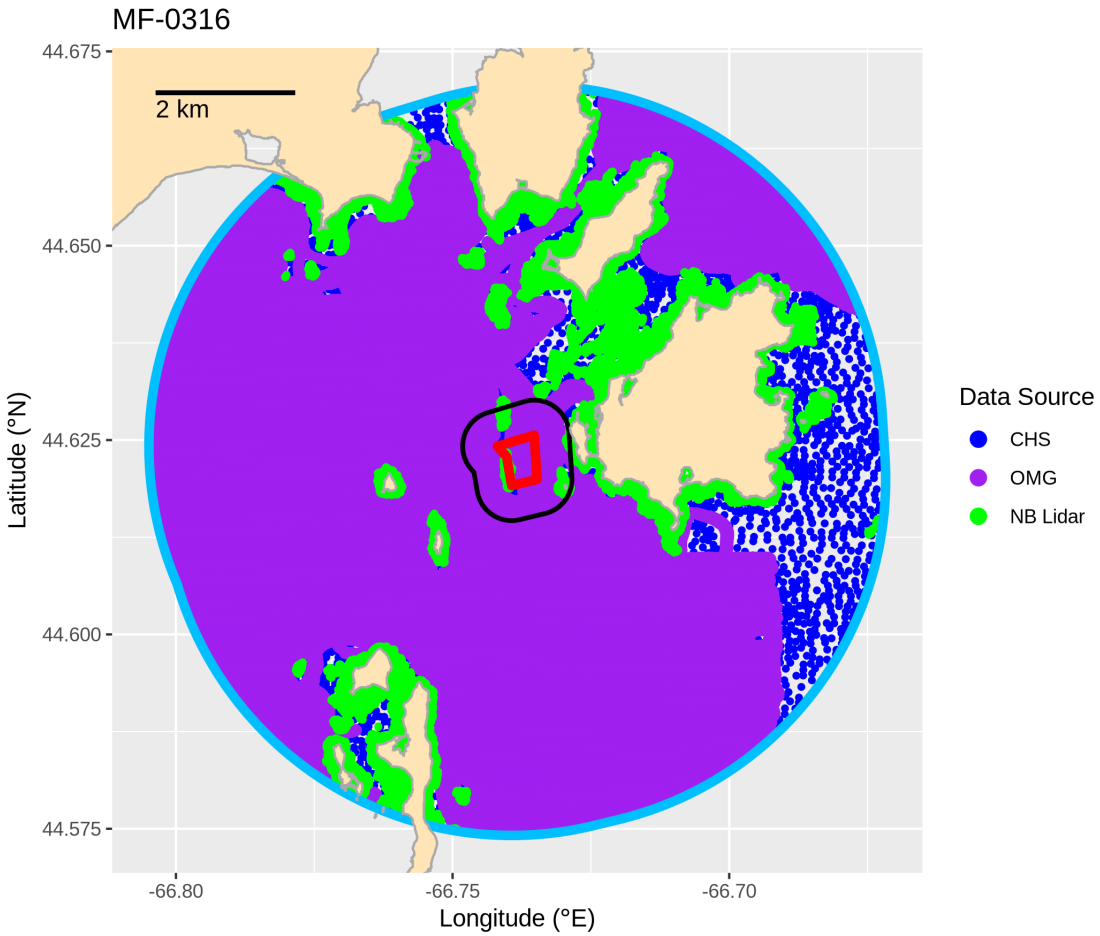


Figure 6.66.1. Farm MF-0316 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

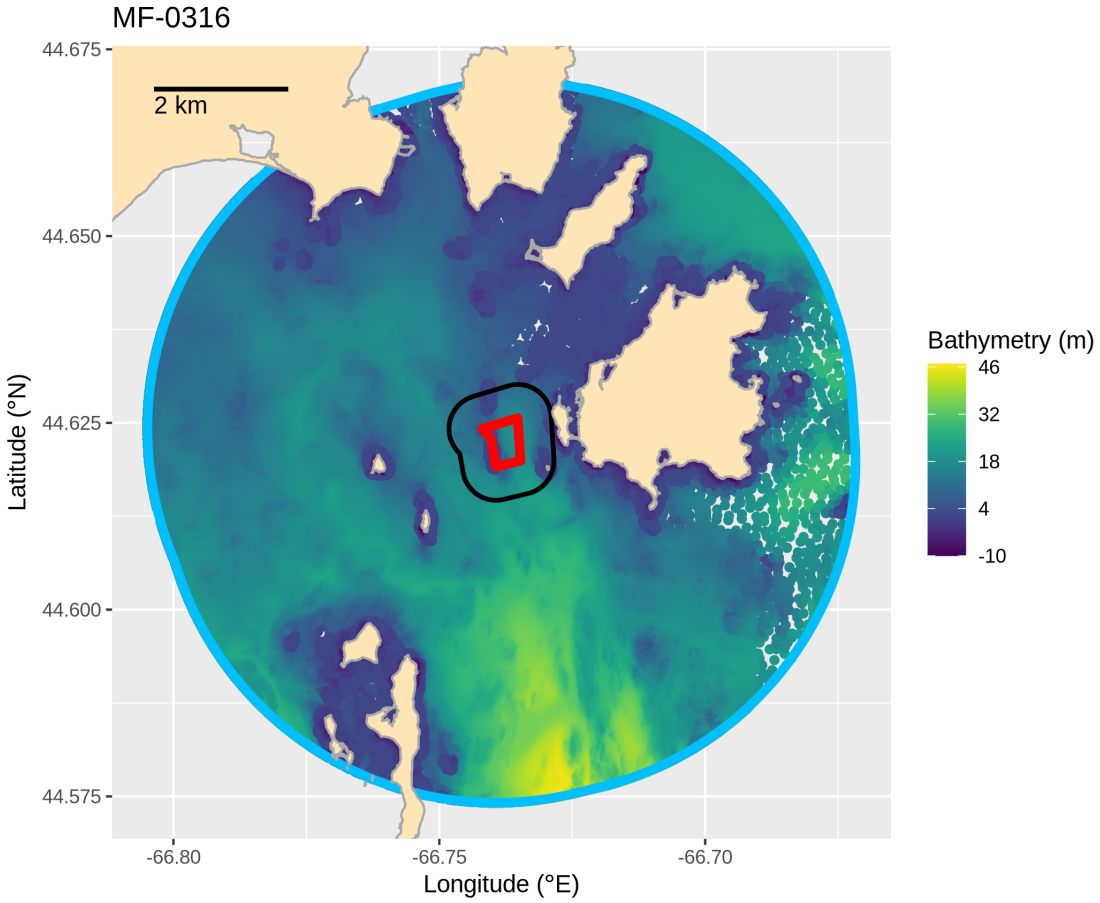


Figure 6.66.2. Farm MF-0316 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.67 Farm MF-0320

The lease centre for farm MF-0320 is 67.0062° W, 44.9936° N and the lease encompasses an area of 200000 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.67.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.67.2. Within the lease boundaries, the bathymetry ranges from 5 m to 47 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 57 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 121 m.

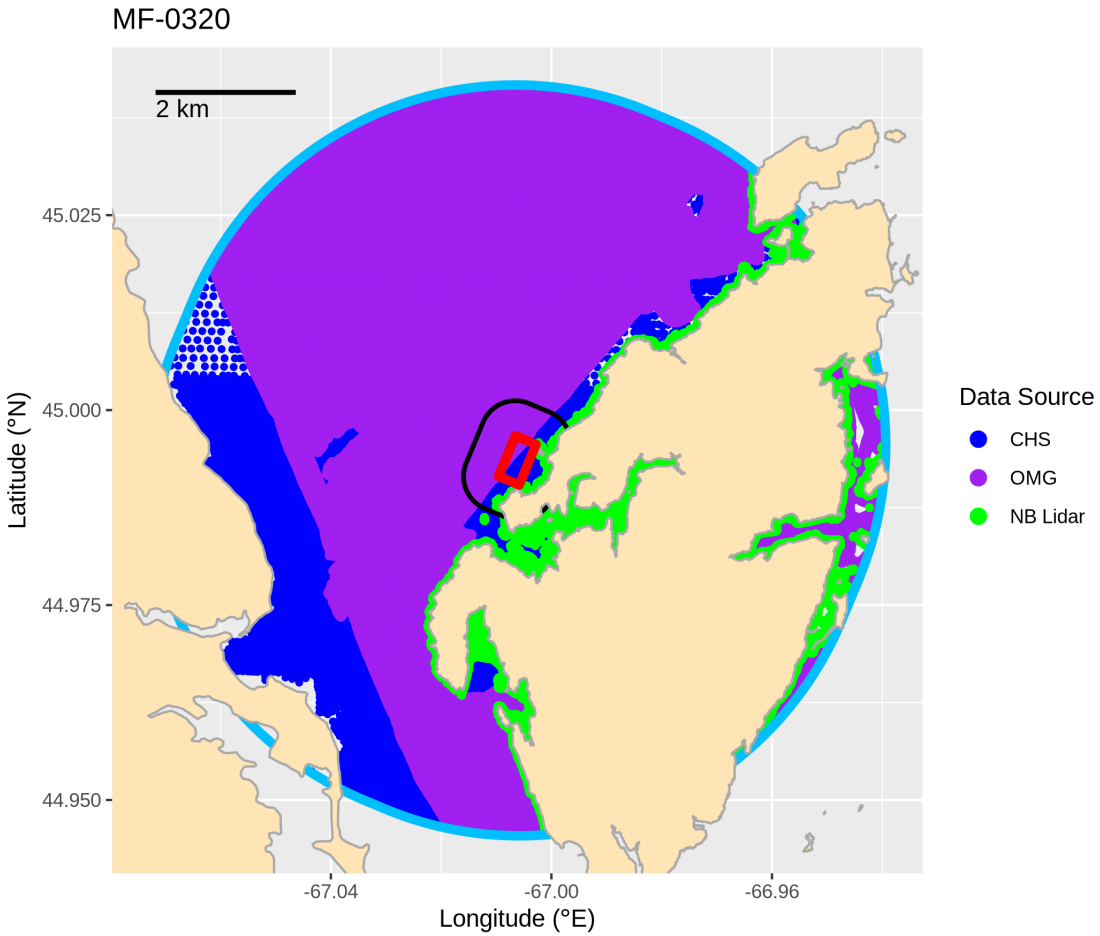


Figure 6.67.1. Farm MF-0320 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

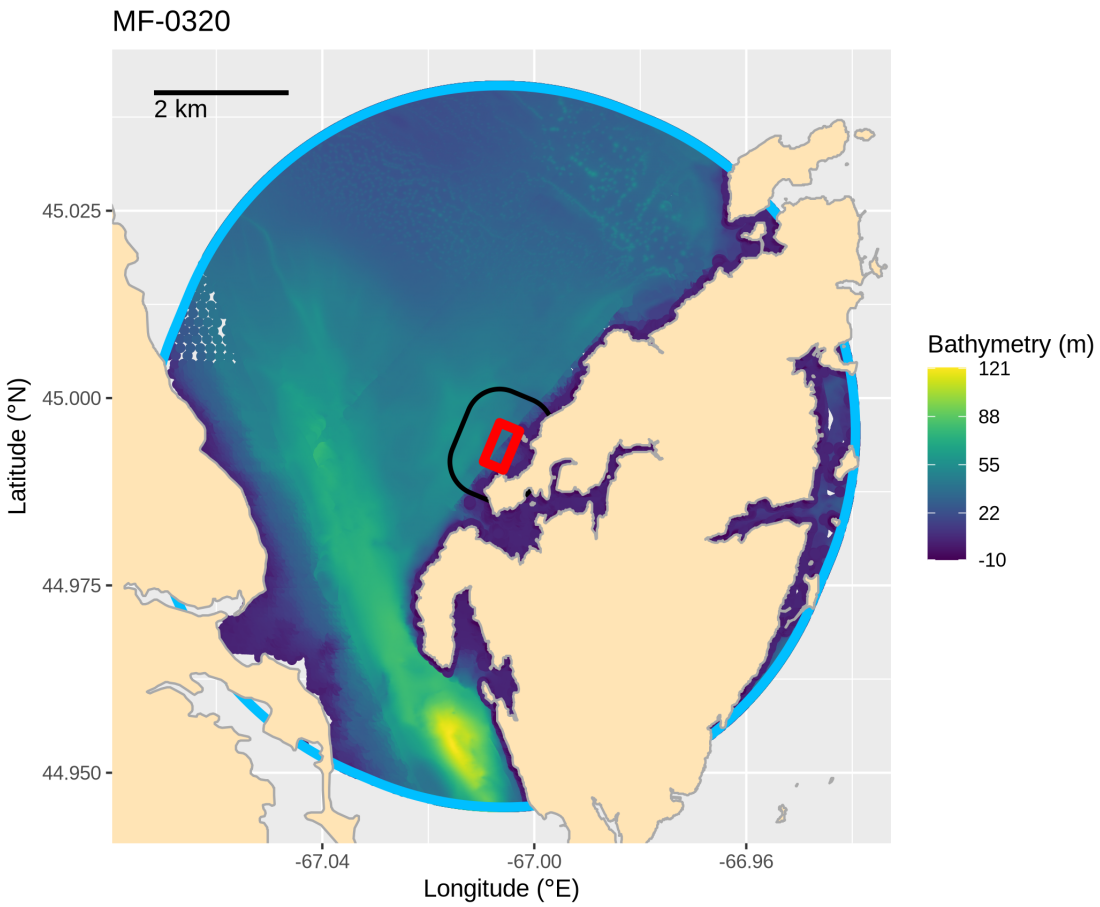


Figure 6.67.2. Farm MF-0320 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.68 Farm MF-0342

The lease centre for farm MF-0342 is 67.0276° W, 45.1378° N and the lease encompasses an area of 202536 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.68.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.68.2. Within the lease boundaries, the bathymetry ranges from 17 m to 21 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 27 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 79 m.

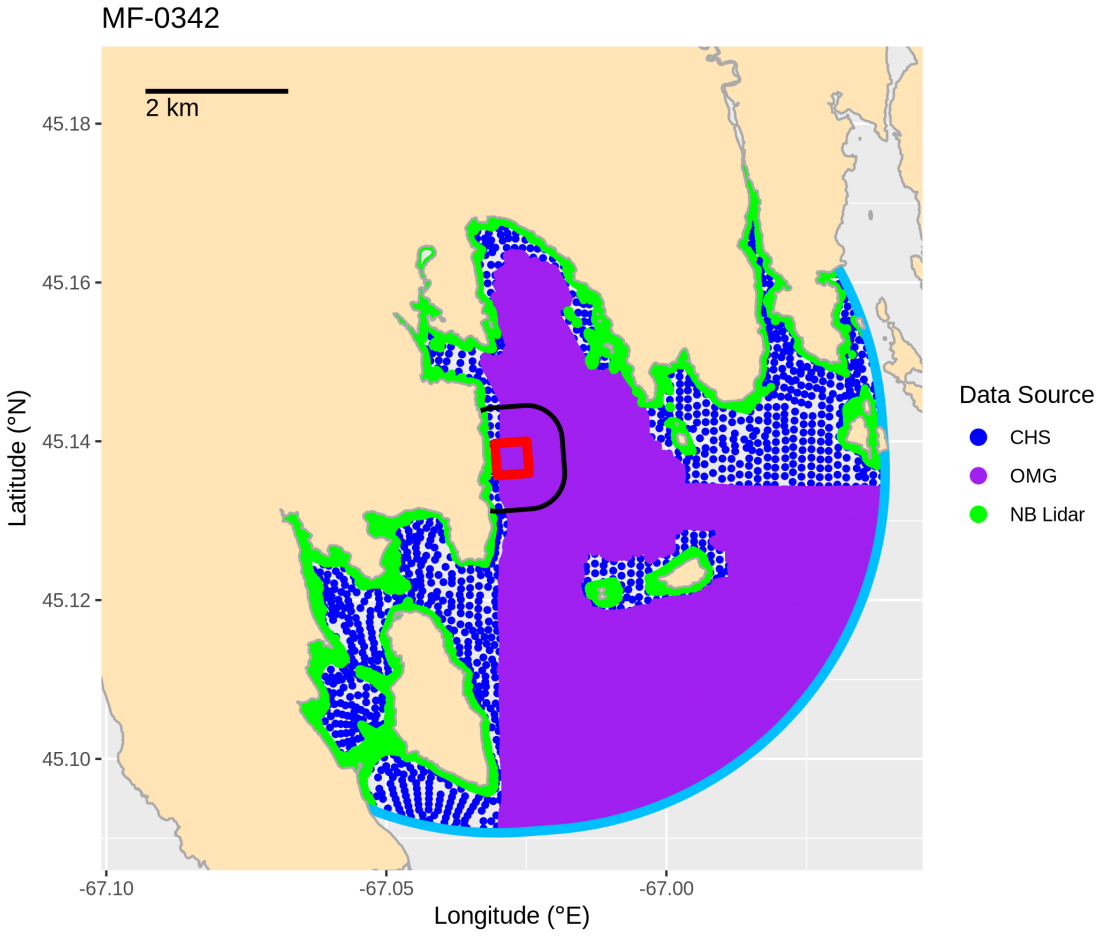


Figure 6.68.1. Farm MF-0342 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

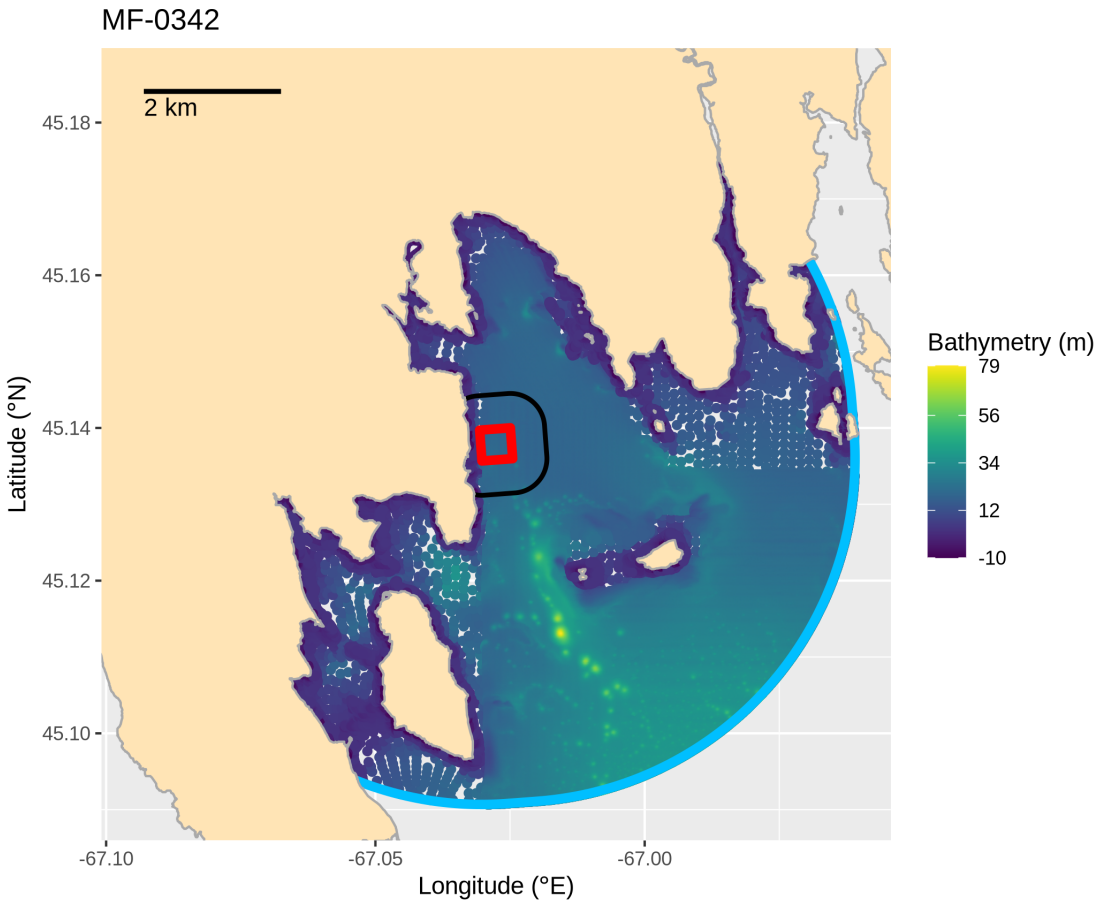


Figure 6.68.2. Farm MF-0342 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.69 Farm MF-0349

The lease centre for farm MF-0349 is 66.7313° W, 44.7179° N and the lease encompasses an area of 118441 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.69.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.69.2. Within the lease boundaries, the bathymetry ranges from 9 m to 11 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 14 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 98 m.

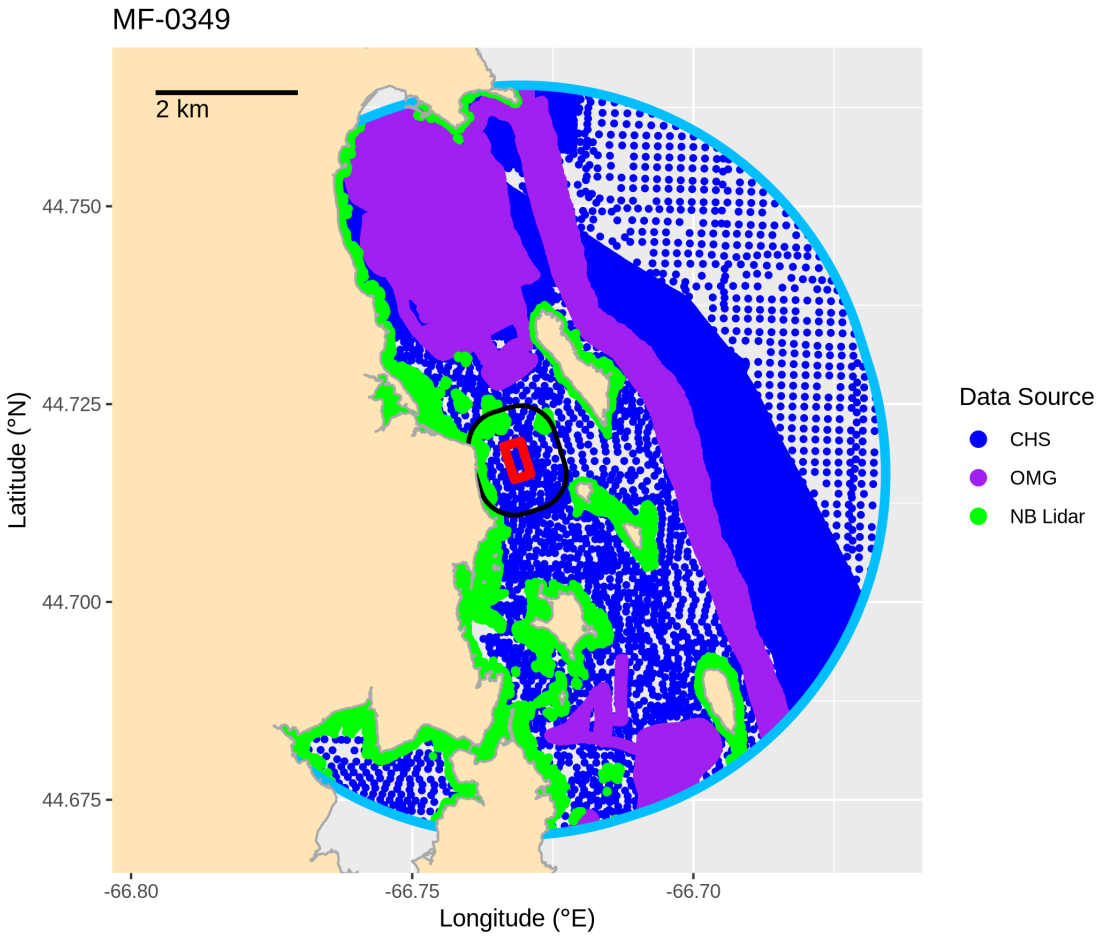


Figure 6.69.1. Farm MF-0349 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

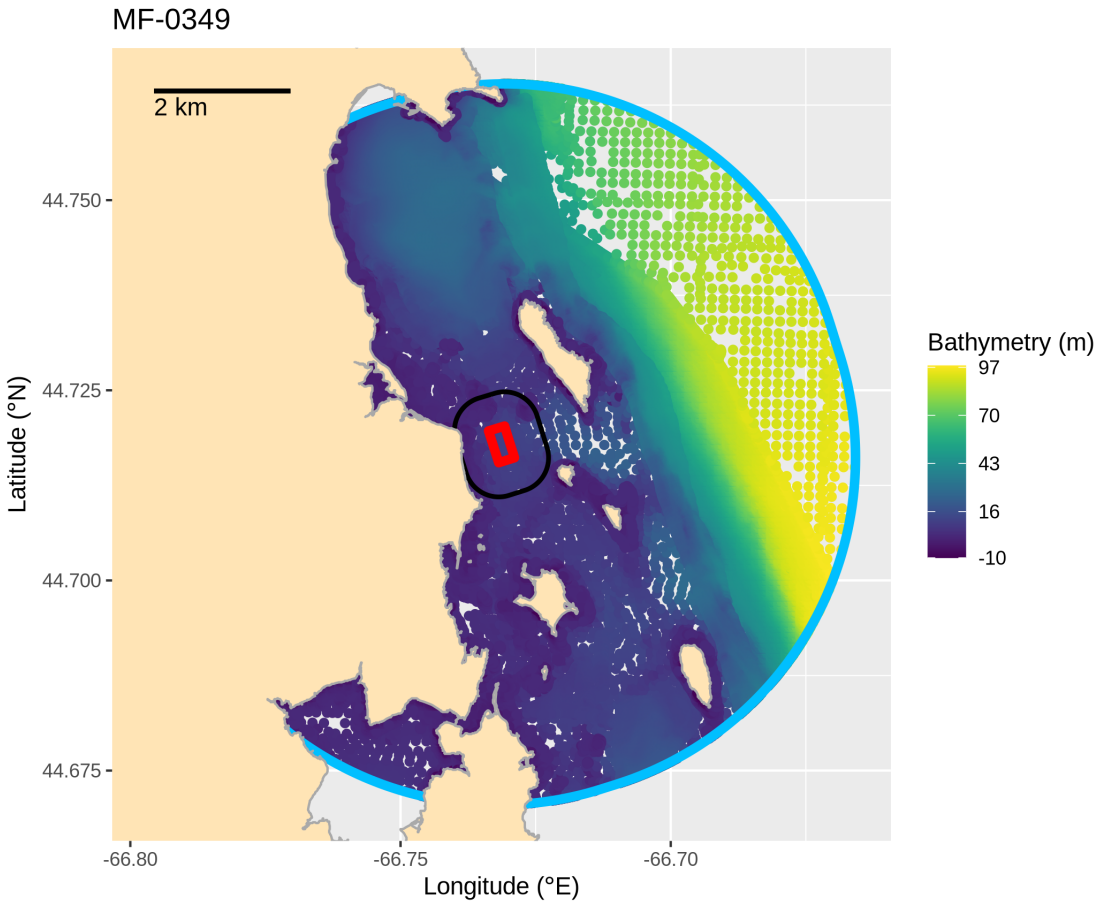


Figure 6.69.2. Farm MF-0349 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.70 Farm MF-0350

The lease centre for farm MF-0350 is 66.7188° W, 44.7225° N and the lease encompasses an area of 149334 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.70.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.70.2. Within the lease boundaries, the bathymetry ranges from -7 m to 19 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 23 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 104 m.

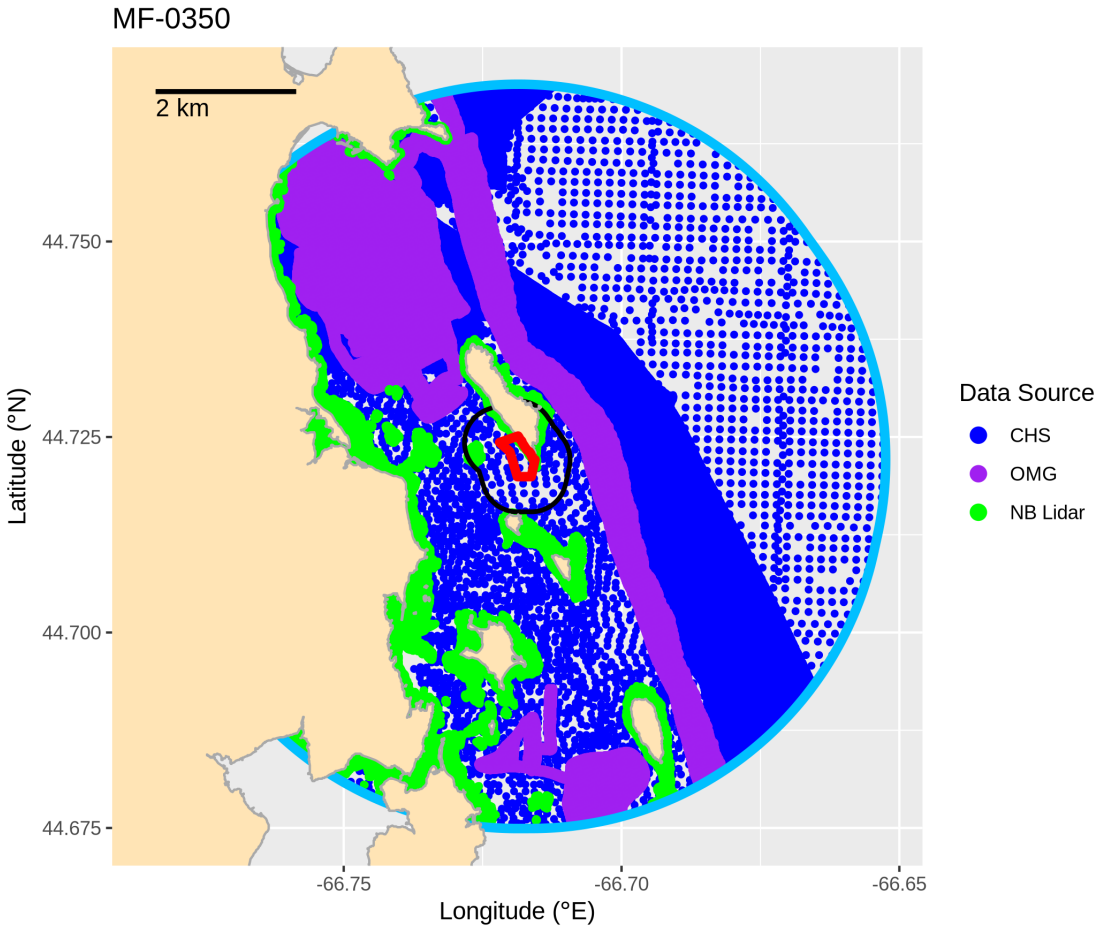


Figure 6.70.1. Farm MF-0350 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

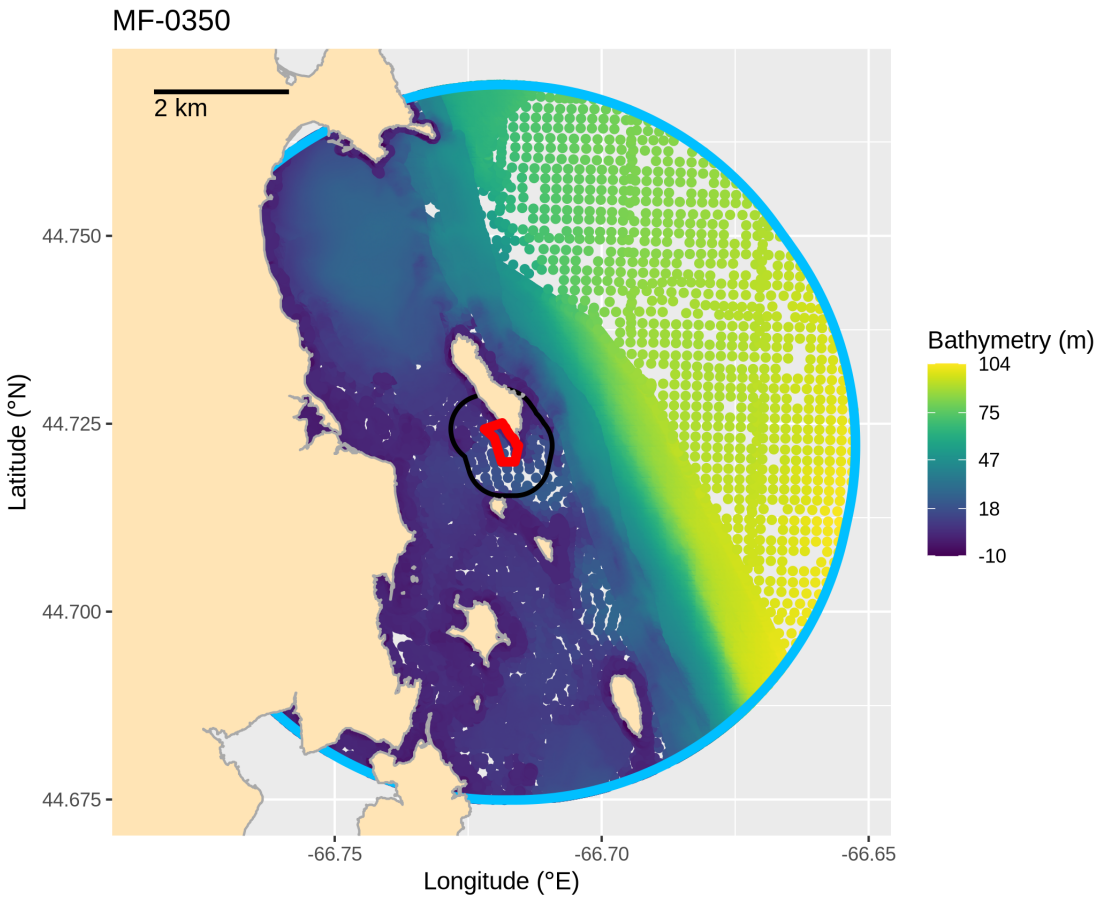


Figure 6.70.2. Farm MF-0350 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.71 Farm MF-0368

The lease centre for farm MF-0368 is 66.7372° W, 44.7303° N and the lease encompasses an area of 152526 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.71.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.71.2. Within the lease boundaries, the bathymetry ranges from 1 m to 17 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -1 m to 23 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 96 m.

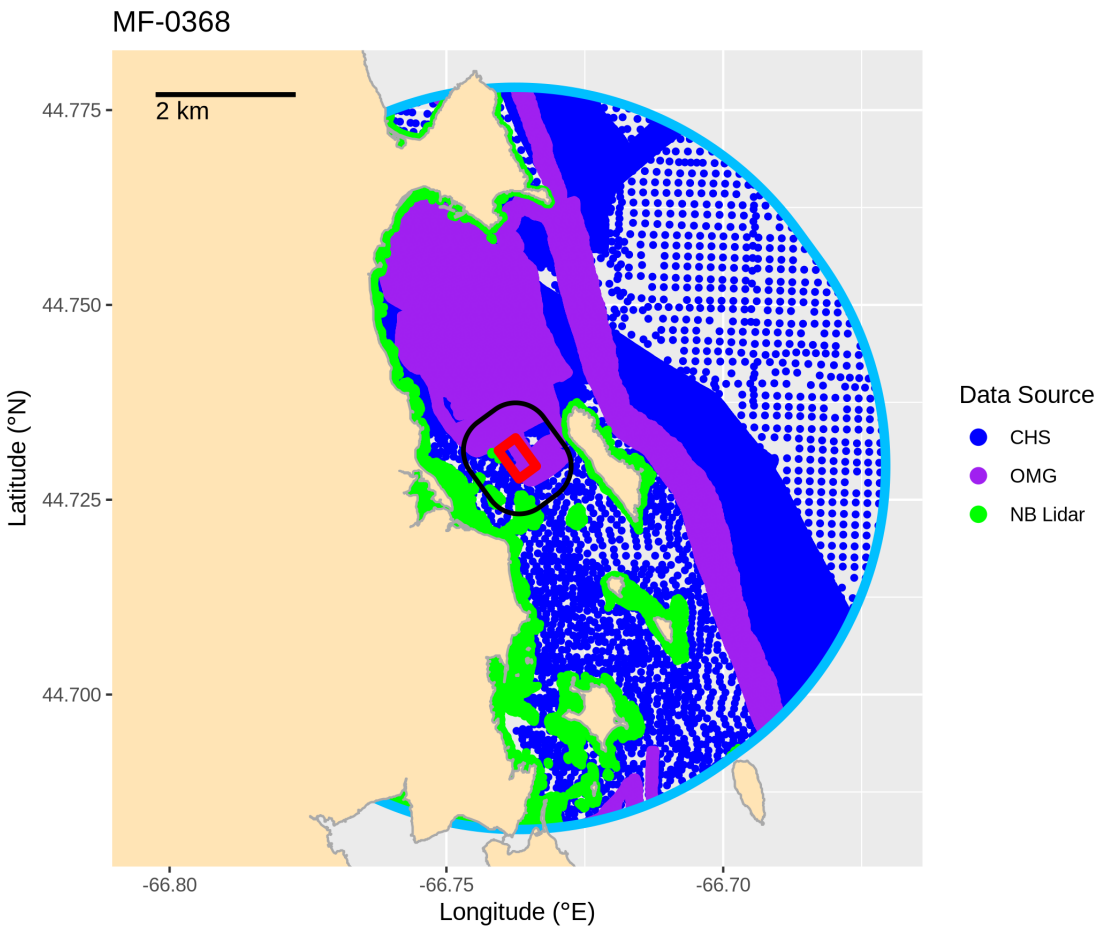


Figure 6.71.1. Farm MF-0368 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

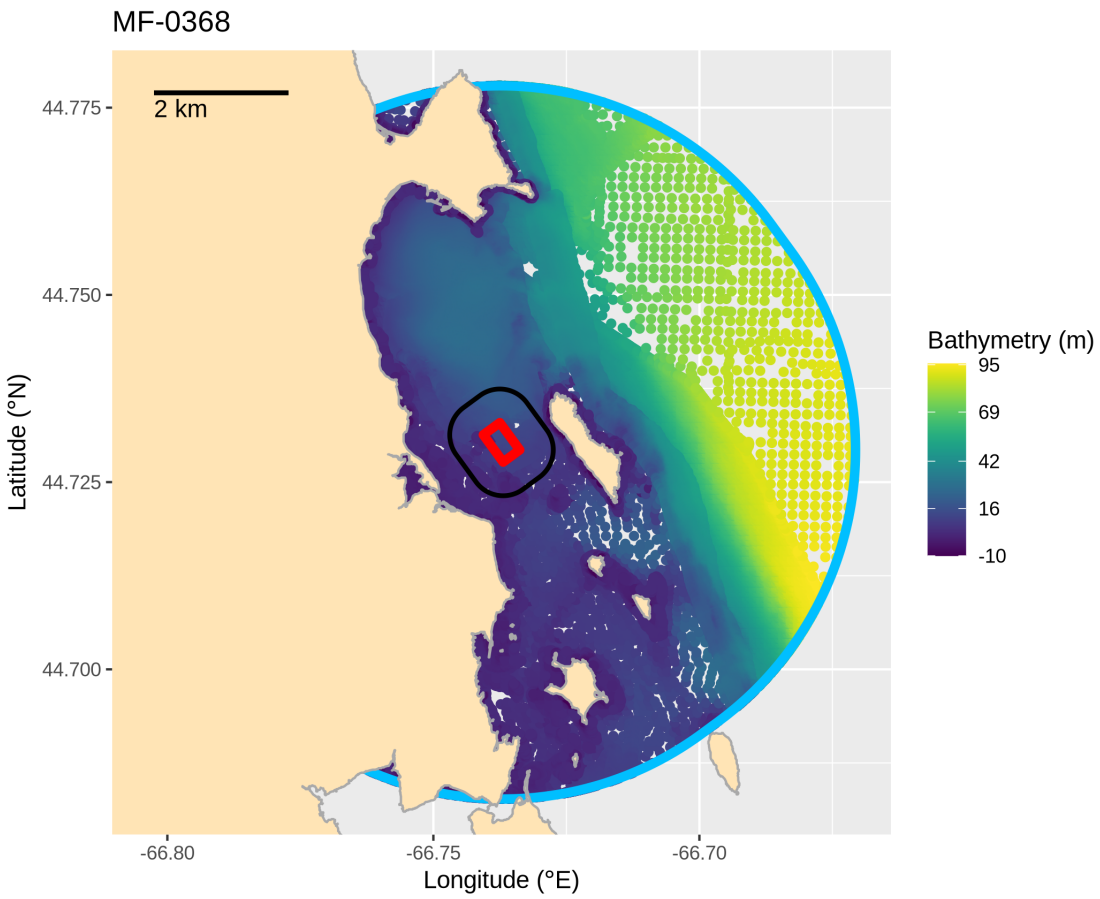


Figure 6.71.2. Farm MF-0368 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.72 Farm MF-0370

The lease centre for farm MF-0370 is 67.0000° W, 45.0734° N and the lease encompasses an area of 194962 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.72.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.72.2. Within the lease boundaries, the bathymetry ranges from 33 m to 55 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from 27 m to 59 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 88 m.

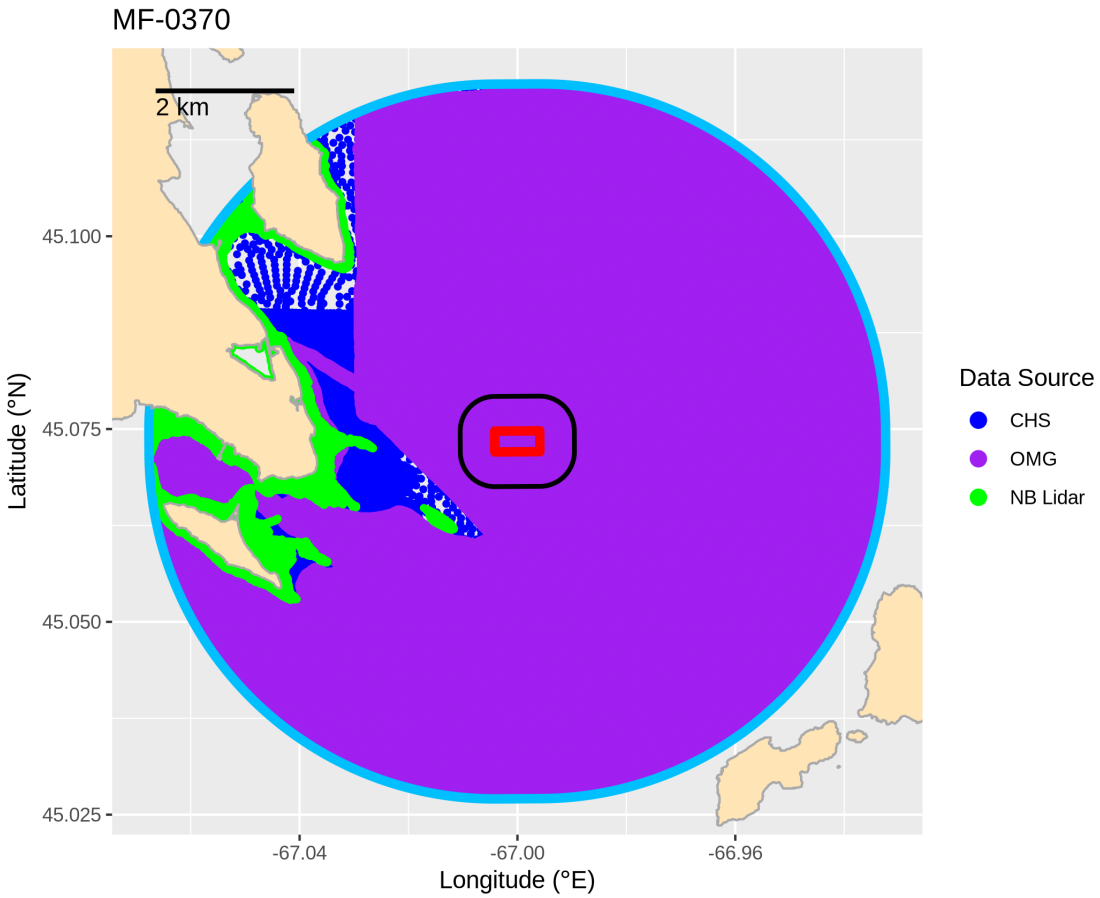


Figure 6.72.1. Farm MF-0370 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

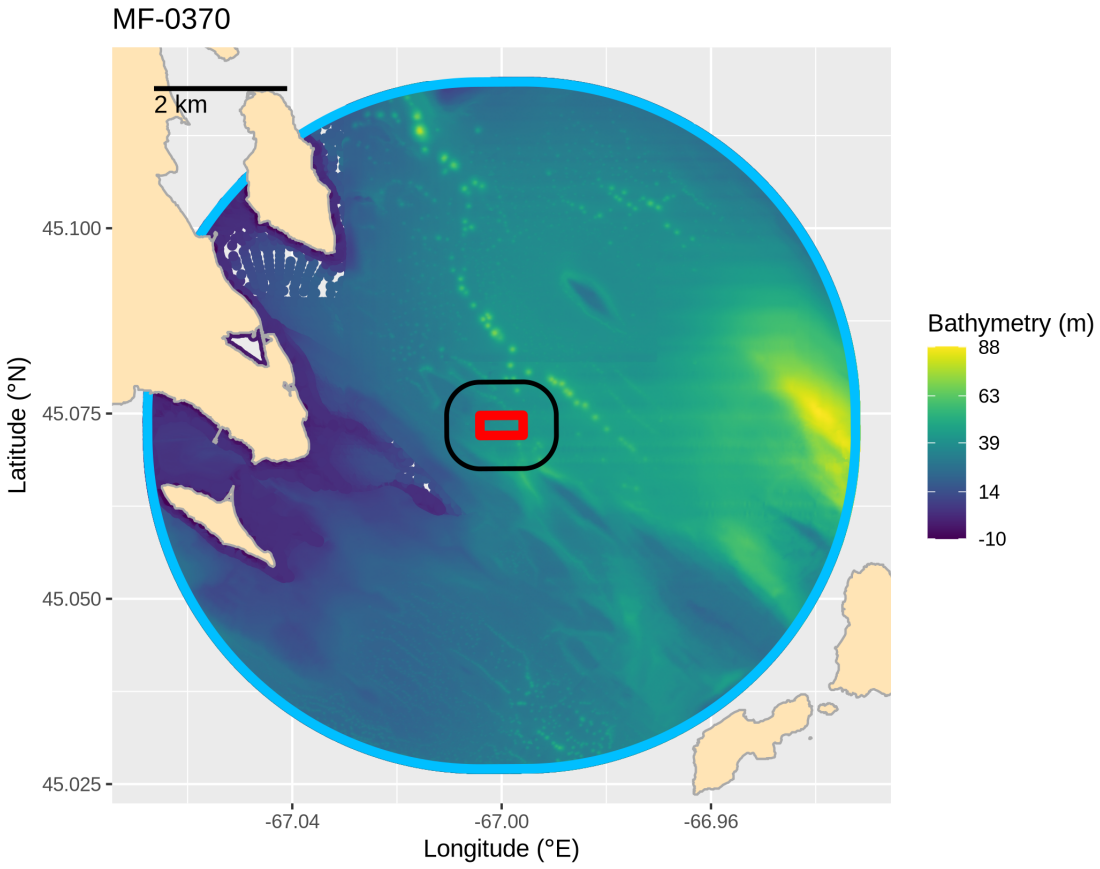


Figure 6.72.2. Farm MF-0370 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.73 Farm MF-0377

The lease centre for farm MF-0377 is 67.0061° W, 45.0312° N and the lease encompasses an area of 299944 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.73.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.73.2. Within the lease boundaries, the bathymetry ranges from 24 m to 36 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from 22 m to 44 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 77 m.

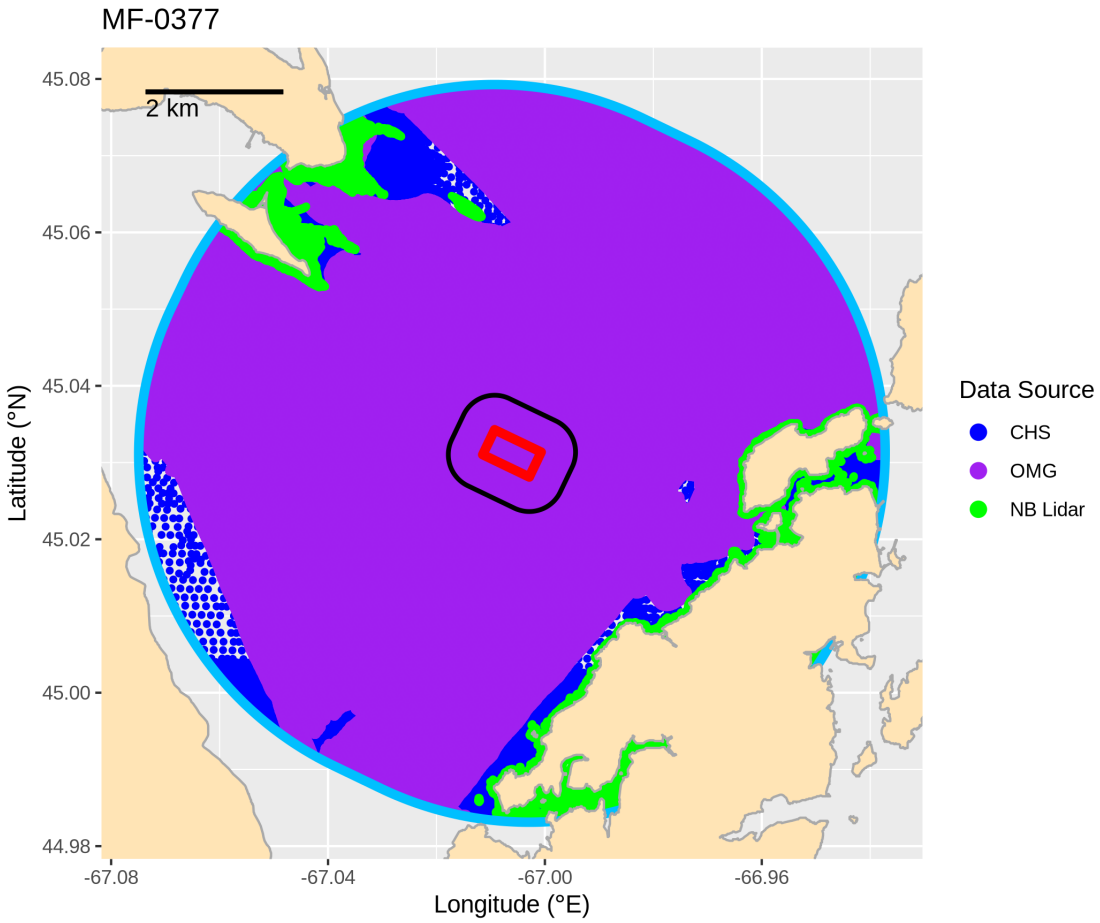


Figure 6.73.1. Farm MF-0377 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

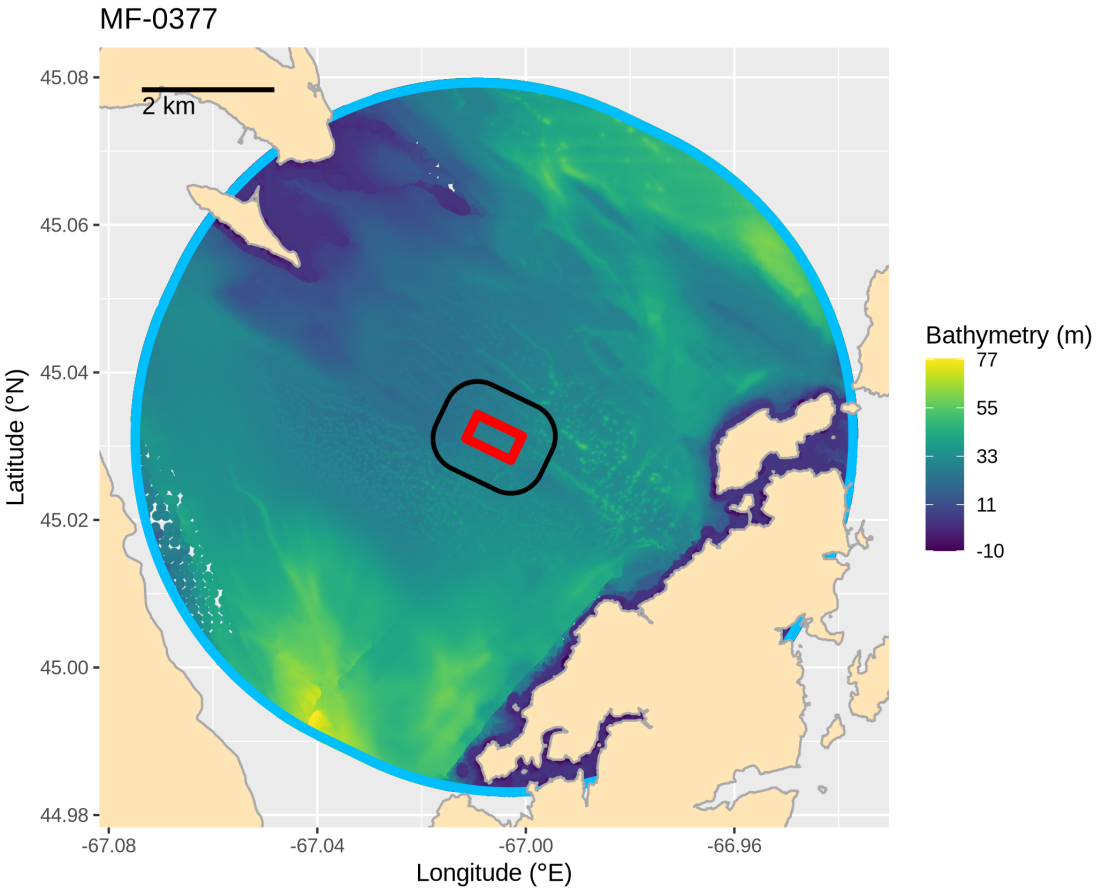


Figure 6.73.2. Farm MF-0377 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.74 Farm MF-0378

The lease centre for farm MF-0378 is 66.6914° W, 45.0663° N and the lease encompasses an area of 411245 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.74.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.74.2. Within the lease boundaries, the bathymetry ranges from -7 m to 39 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 44 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 68 m.

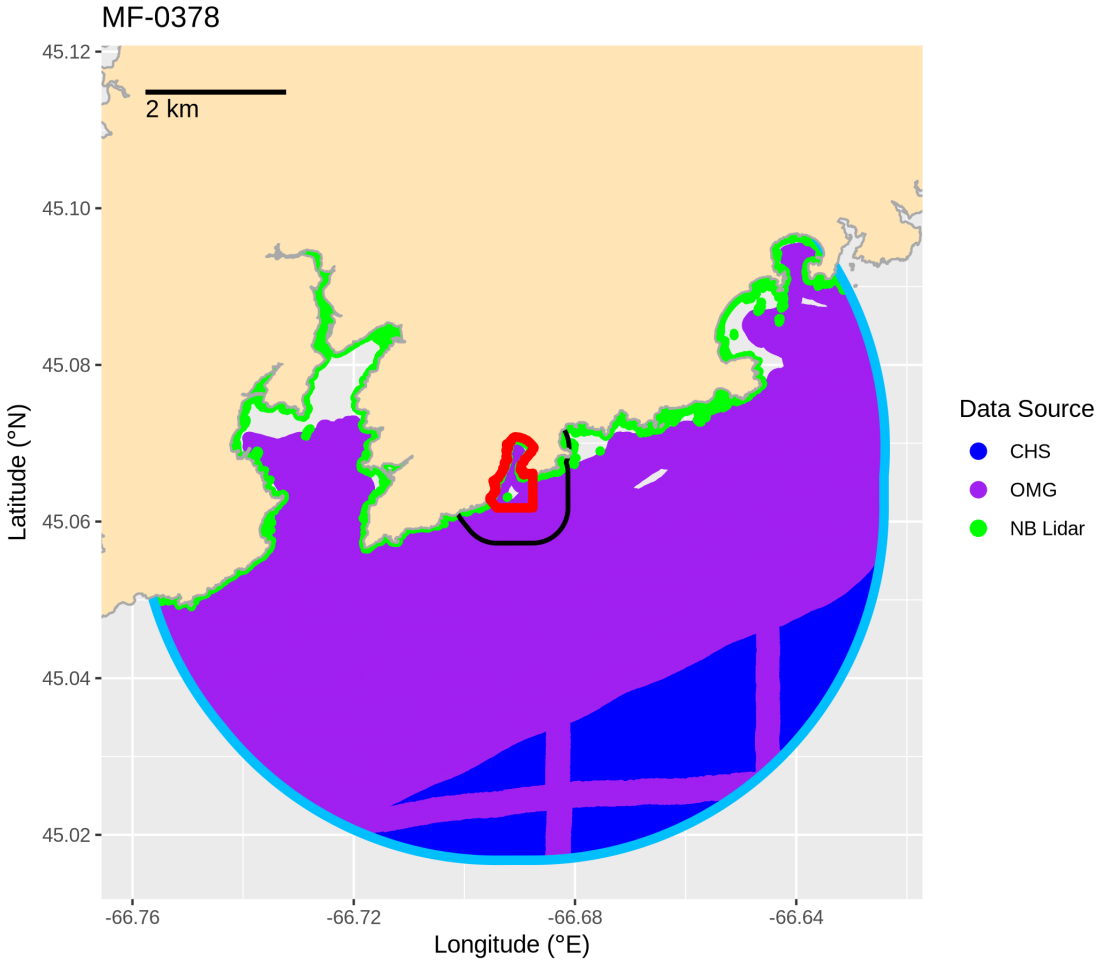


Figure 6.74.1. Farm MF-0378 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

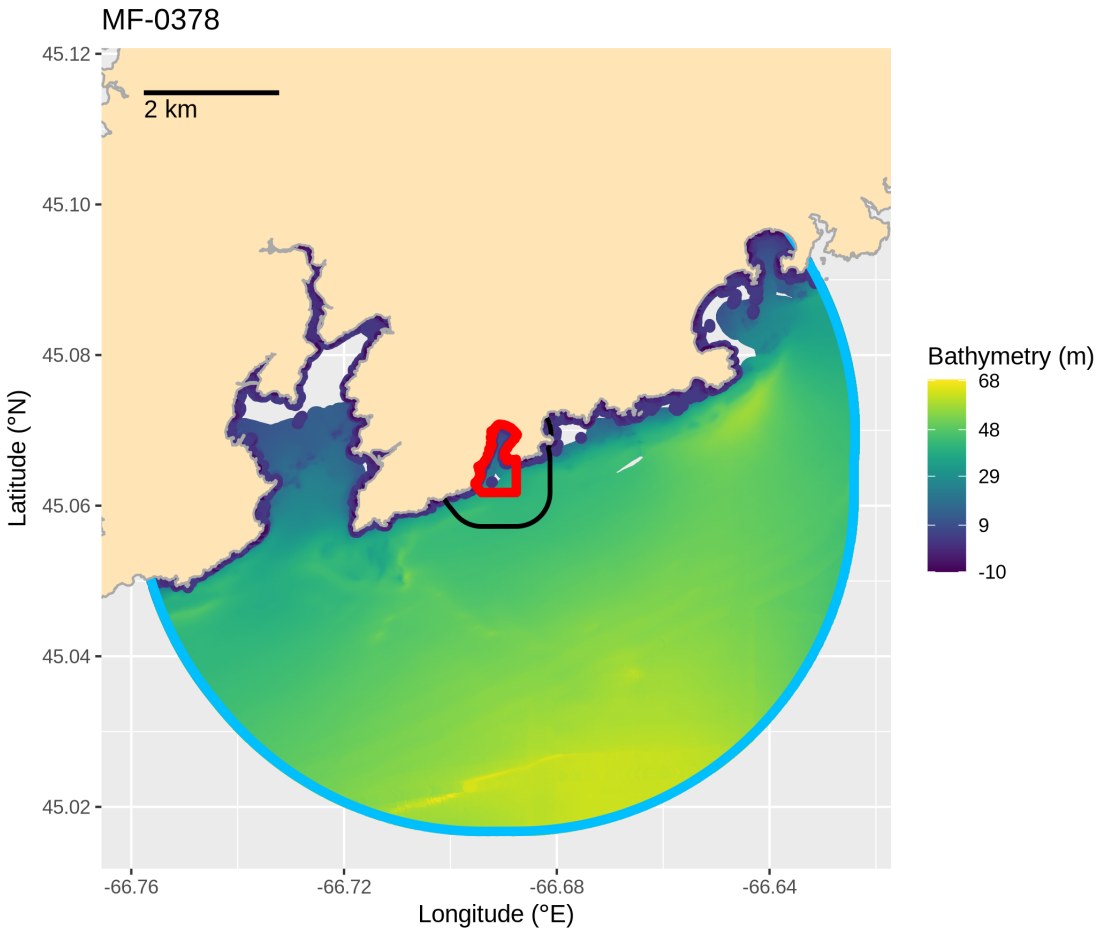


Figure 6.74.2. Farm MF-0378 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.75 Farm MF-0381

The lease centre for farm MF-0381 is 66.7281° W, 44.6149° N and the lease encompasses an area of 239200 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.75.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.75.2. Within the lease boundaries, the bathymetry ranges from 3 m to 24 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 28 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 52 m.

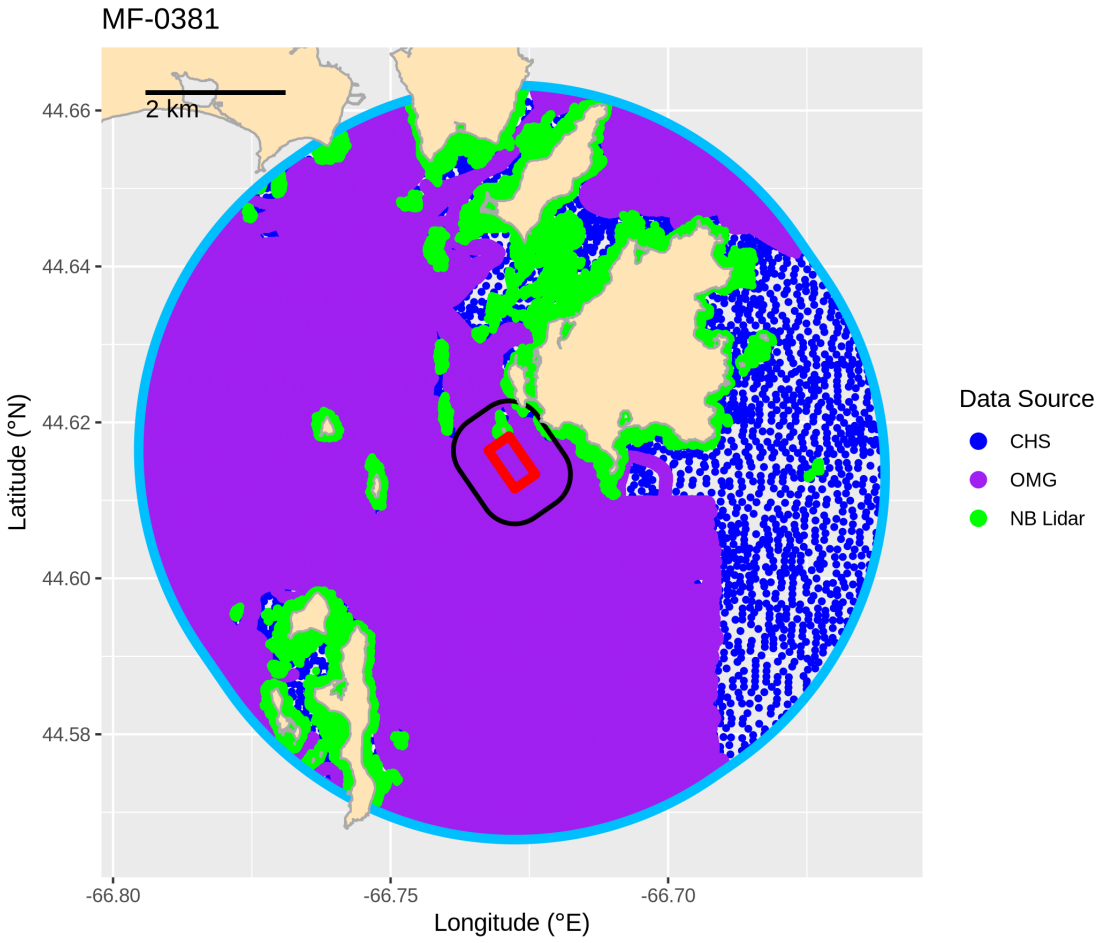


Figure 6.75.1. Farm MF-0381 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

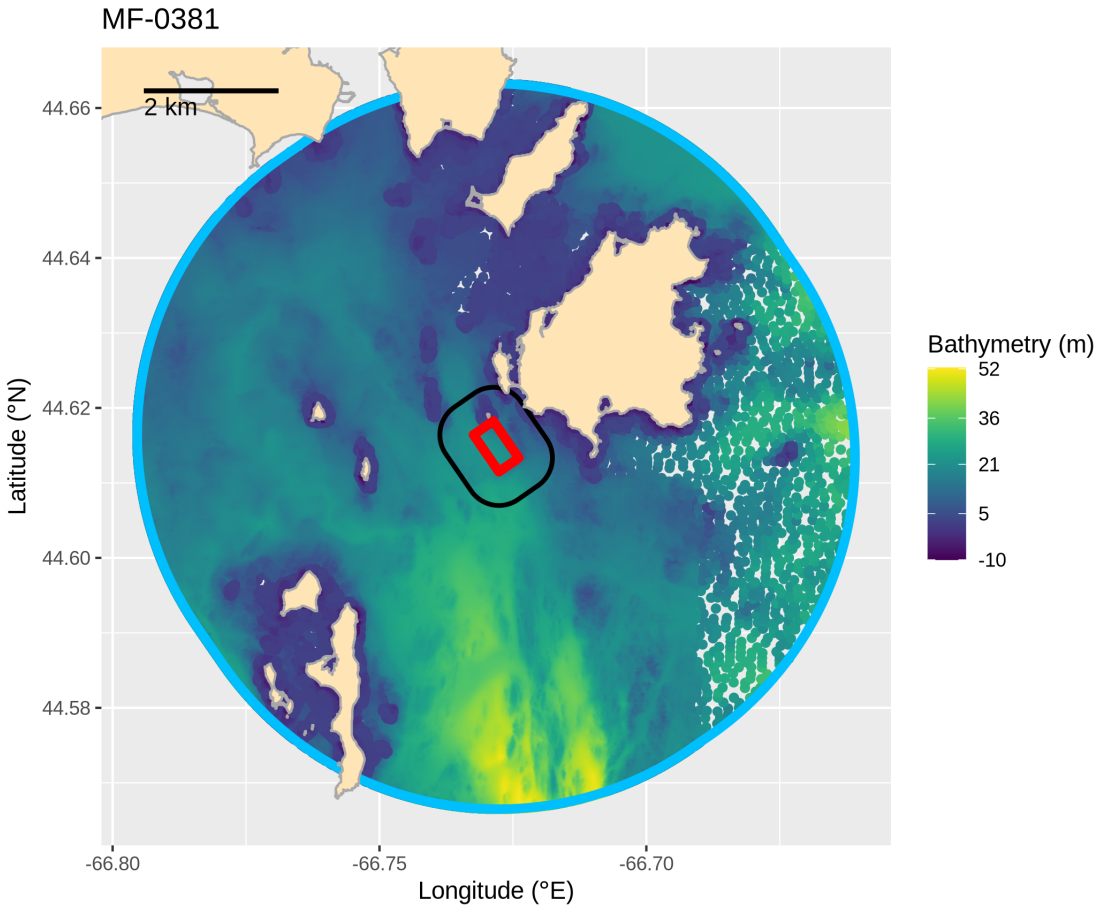


Figure 6.75.2. Farm MF-0381 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.76 Farm MF-0400

The lease centre for farm MF-0400 is 66.6447° W, 45.0804° N and the lease encompasses an area of 227534 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.76.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.76.2. Within the lease boundaries, the bathymetry ranges from 1 m to 36 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 57 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 62 m.

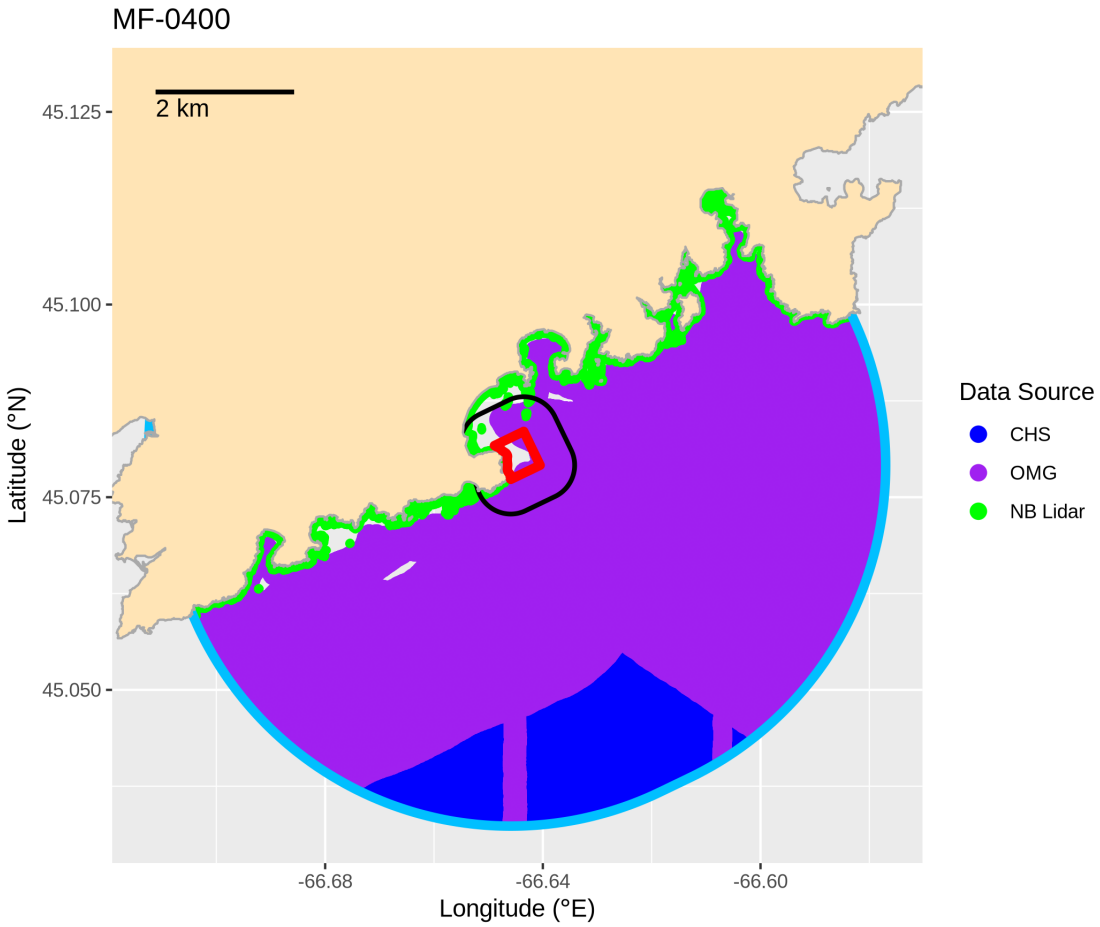


Figure 6.76.1. Farm MF-0400 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

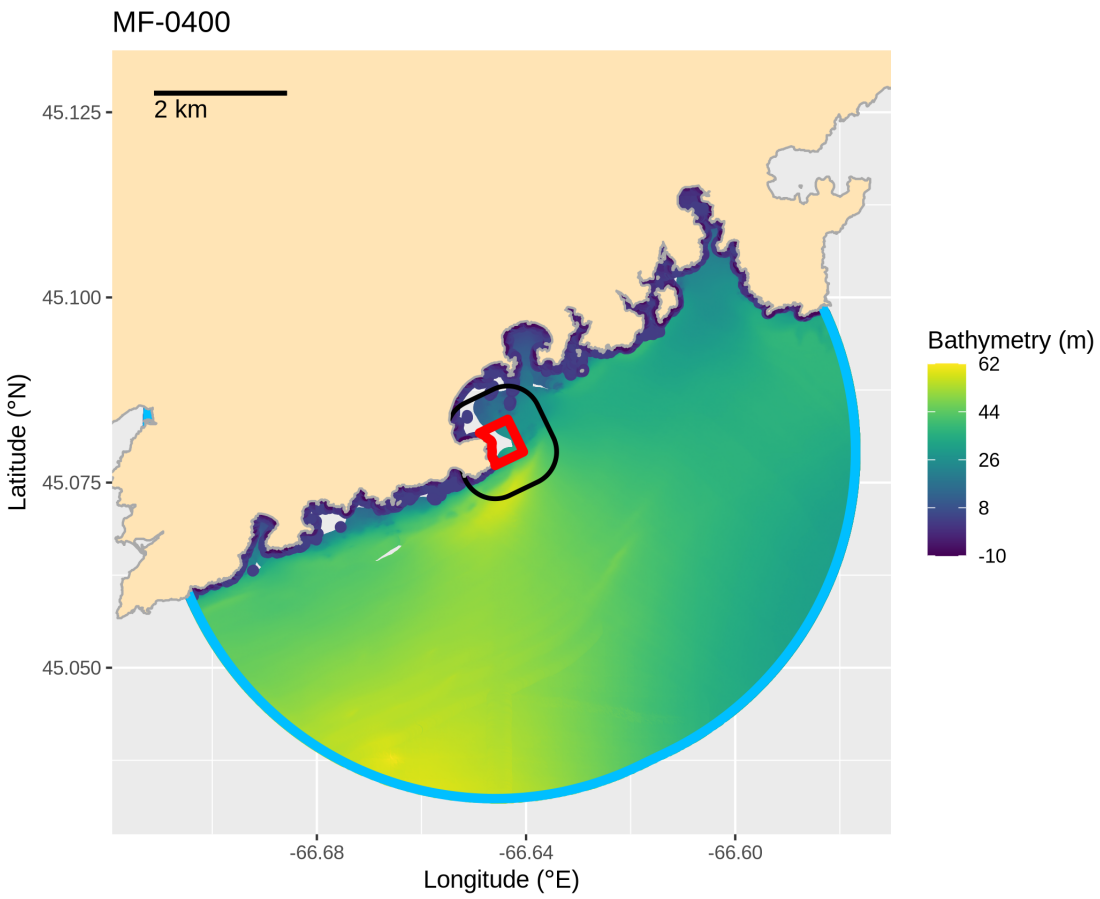


Figure 6.76.2. Farm MF-0400 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.77 Farm MF-0403

The lease centre for farm MF-0403 is 66.8015° W, 44.6246° N and the lease encompasses an area of 279588 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.77.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.77.2. Within the lease boundaries, the bathymetry ranges from 9 m to 15 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -3 m to 16 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 41 m.

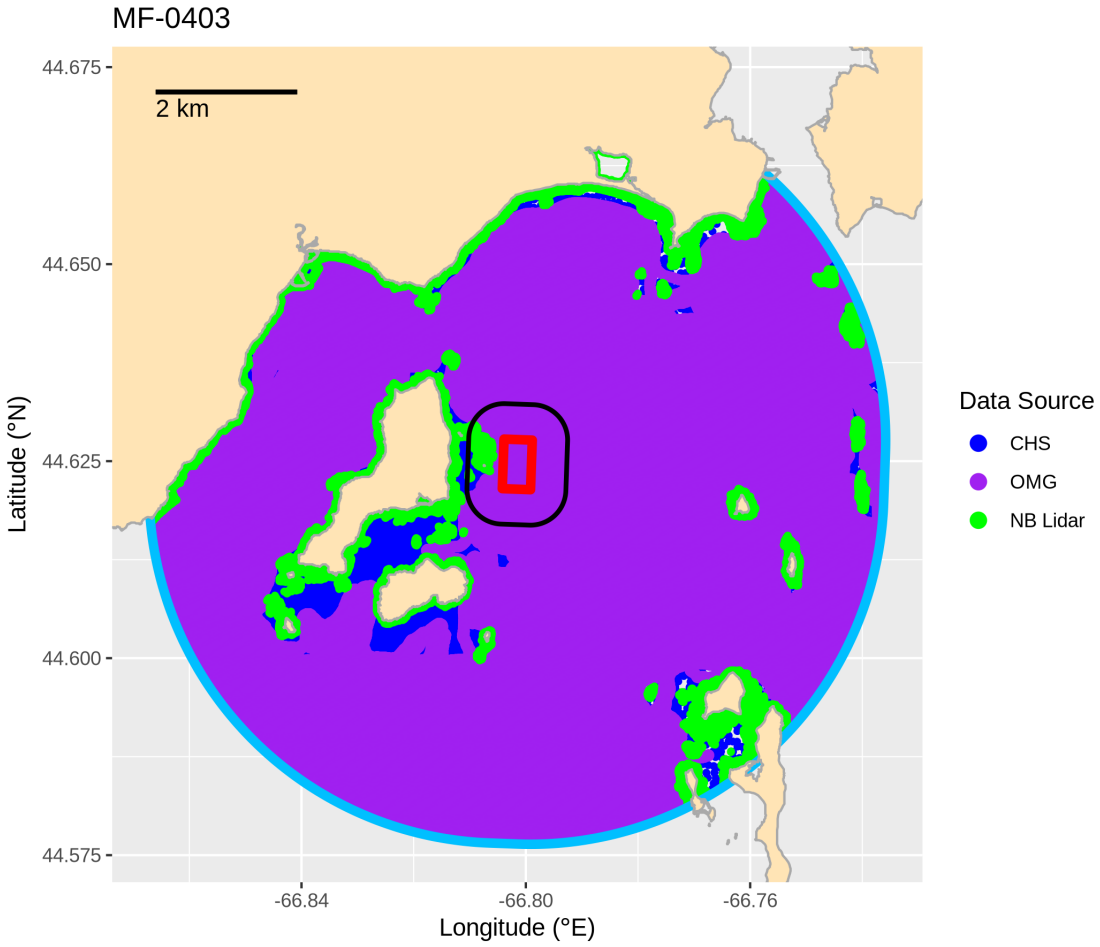


Figure 6.77.1. Farm MF-0403 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

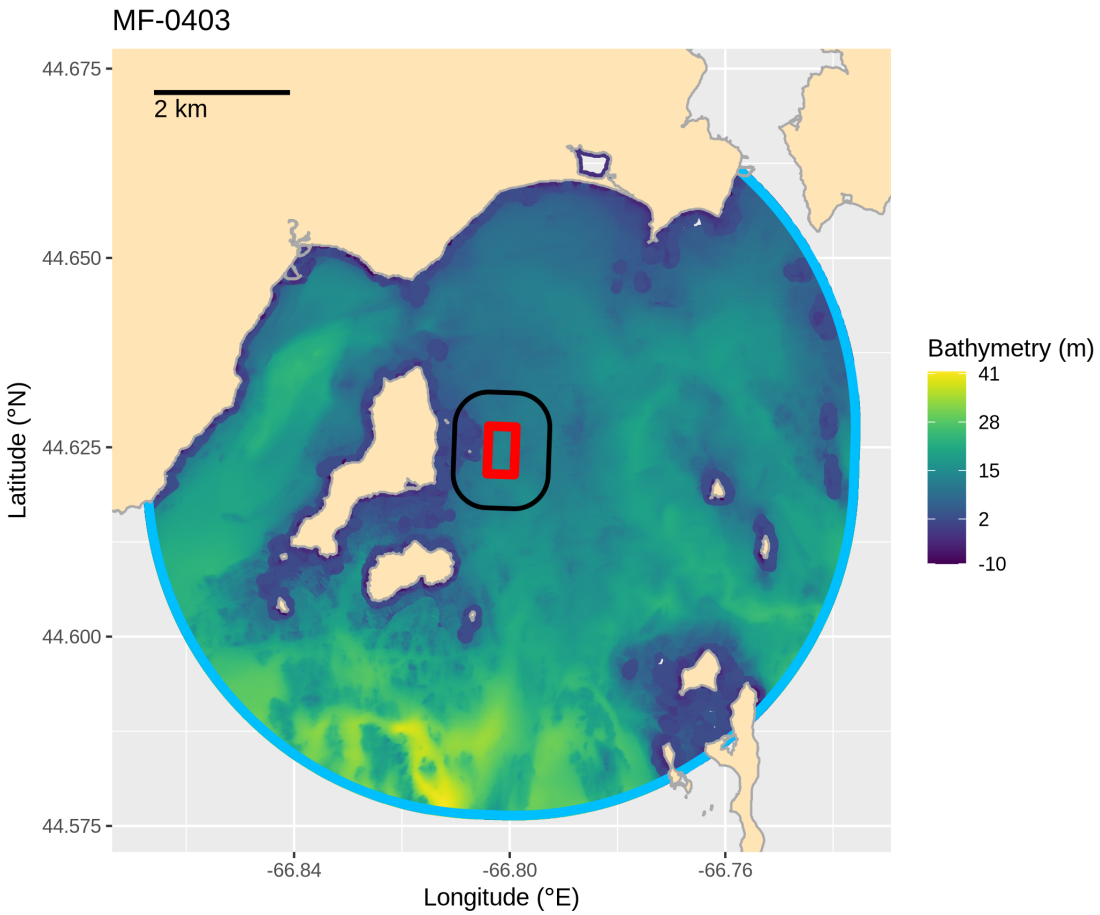


Figure 6.77.2. Farm MF-0403 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.78 Farm MF-0404

The lease centre for farm MF-0404 is 66.4874° W, 45.0821° N and the lease encompasses an area of 280079 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.78.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.78.2. There are no bathymetric data found within the lease boundaries. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -2 m to 31 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 59 m.

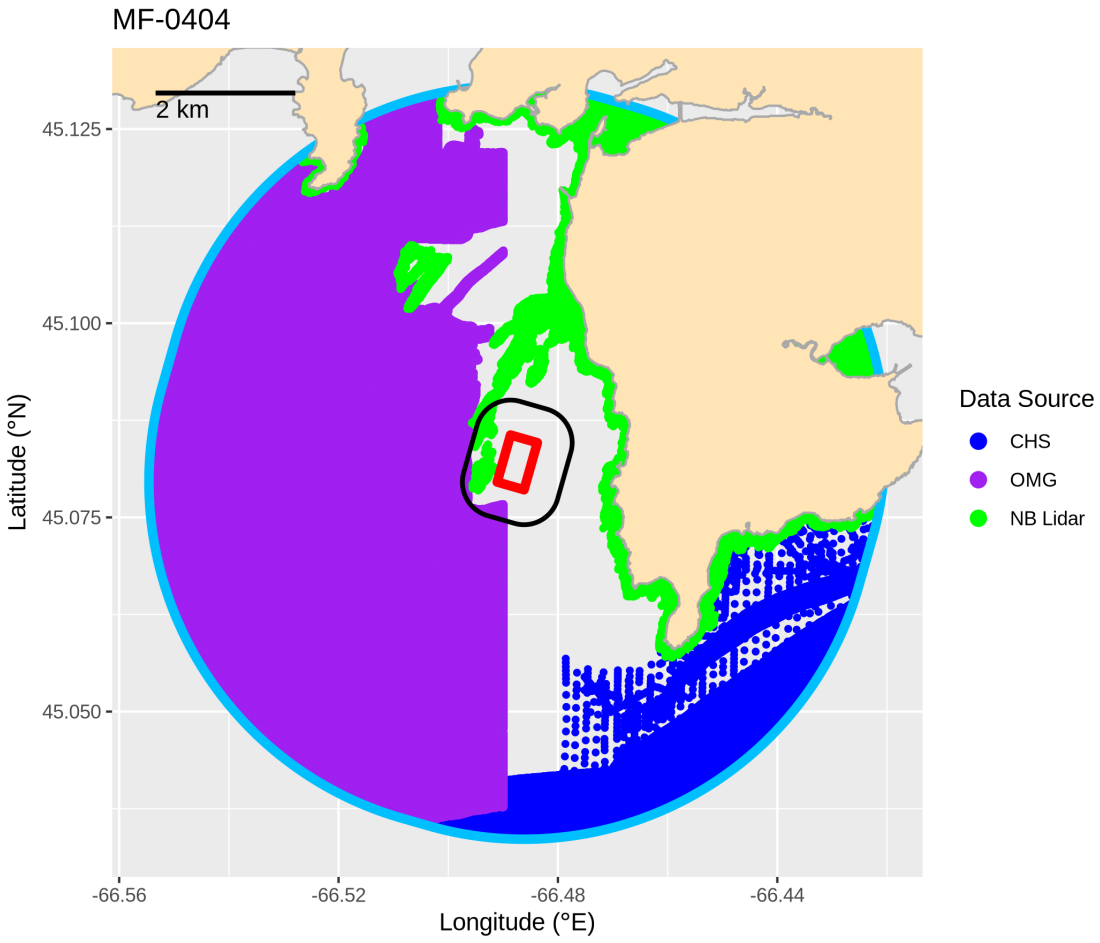


Figure 6.78.1. Farm MF-0404 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

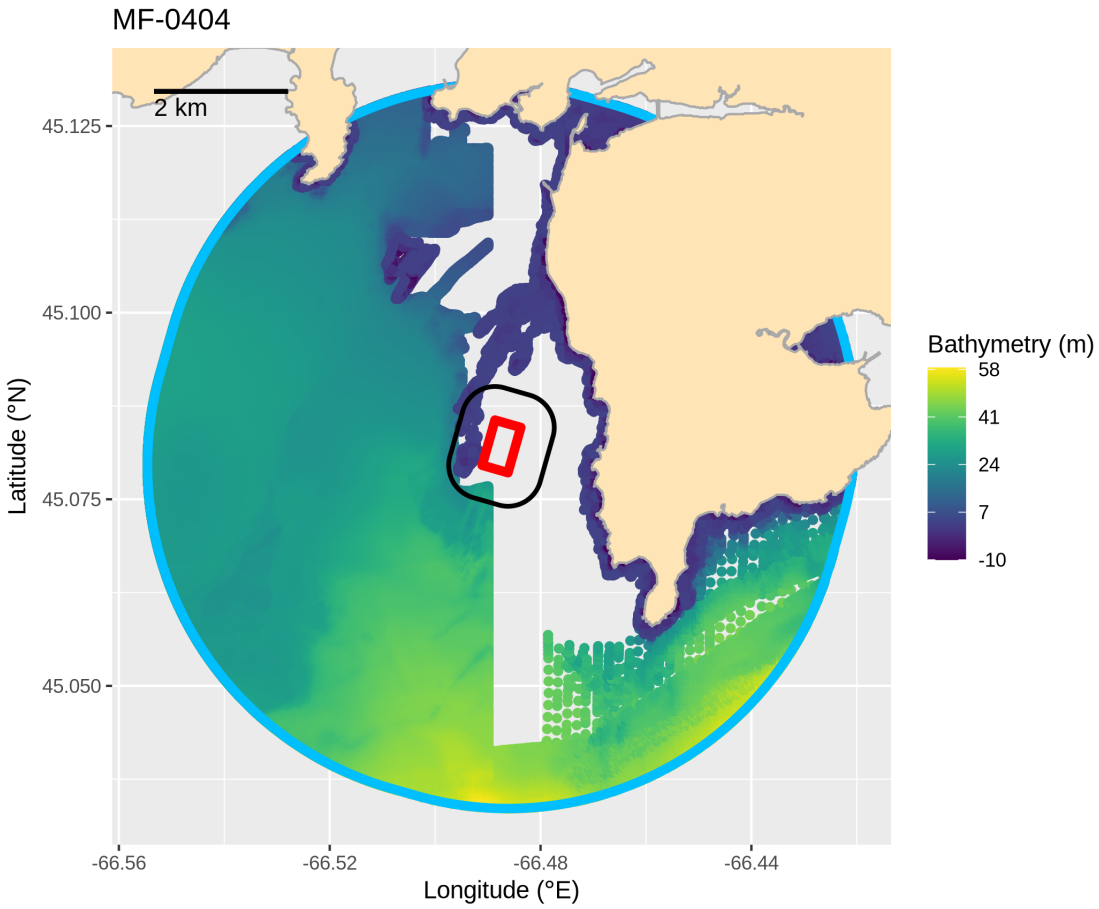


Figure 6.78.2. Farm MF-0404 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.79 Farm MF-0408

The lease centre for farm MF-0408 is 66.8043° W, 44.6124° N and the lease encompasses an area of 329877 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.79.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.79.2. Within the lease boundaries, the bathymetry ranges from 8 m to 18 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 19 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 46 m.

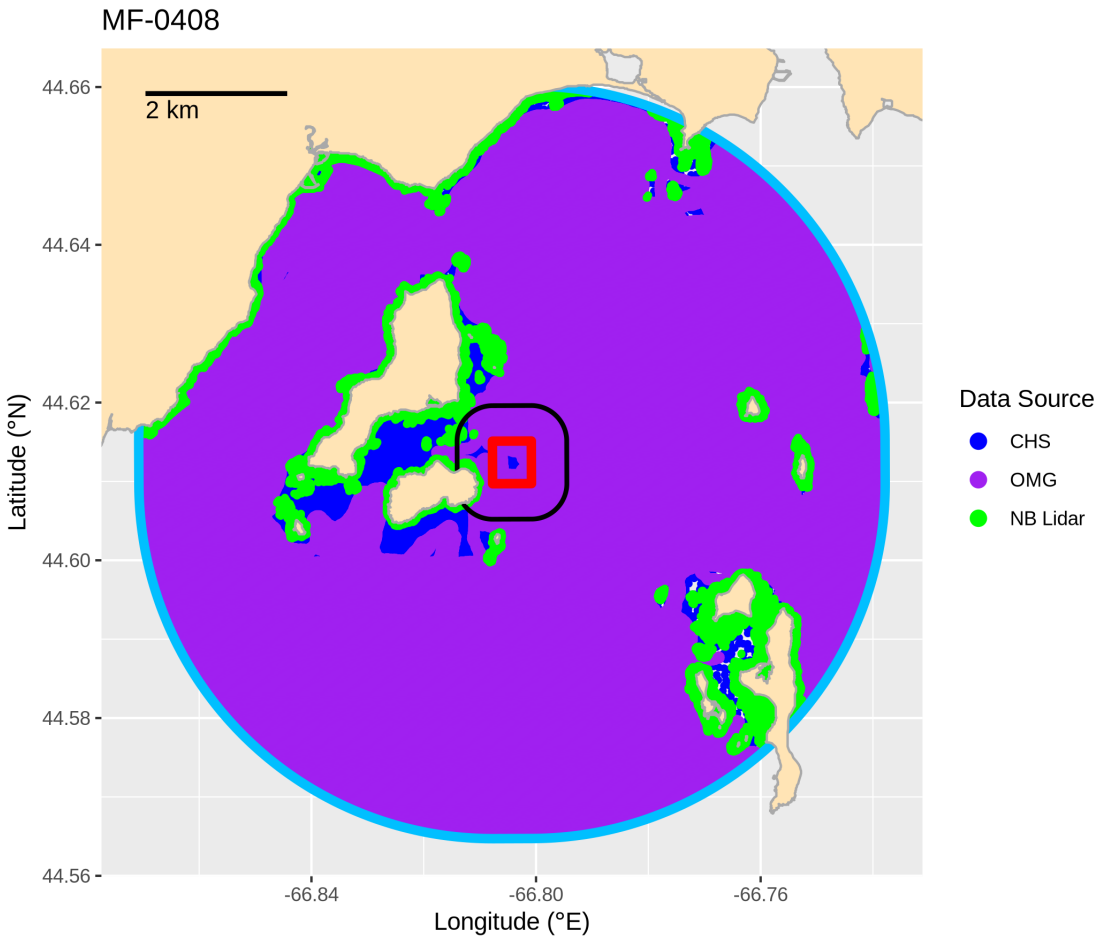


Figure 6.79.1. Farm MF-0408 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

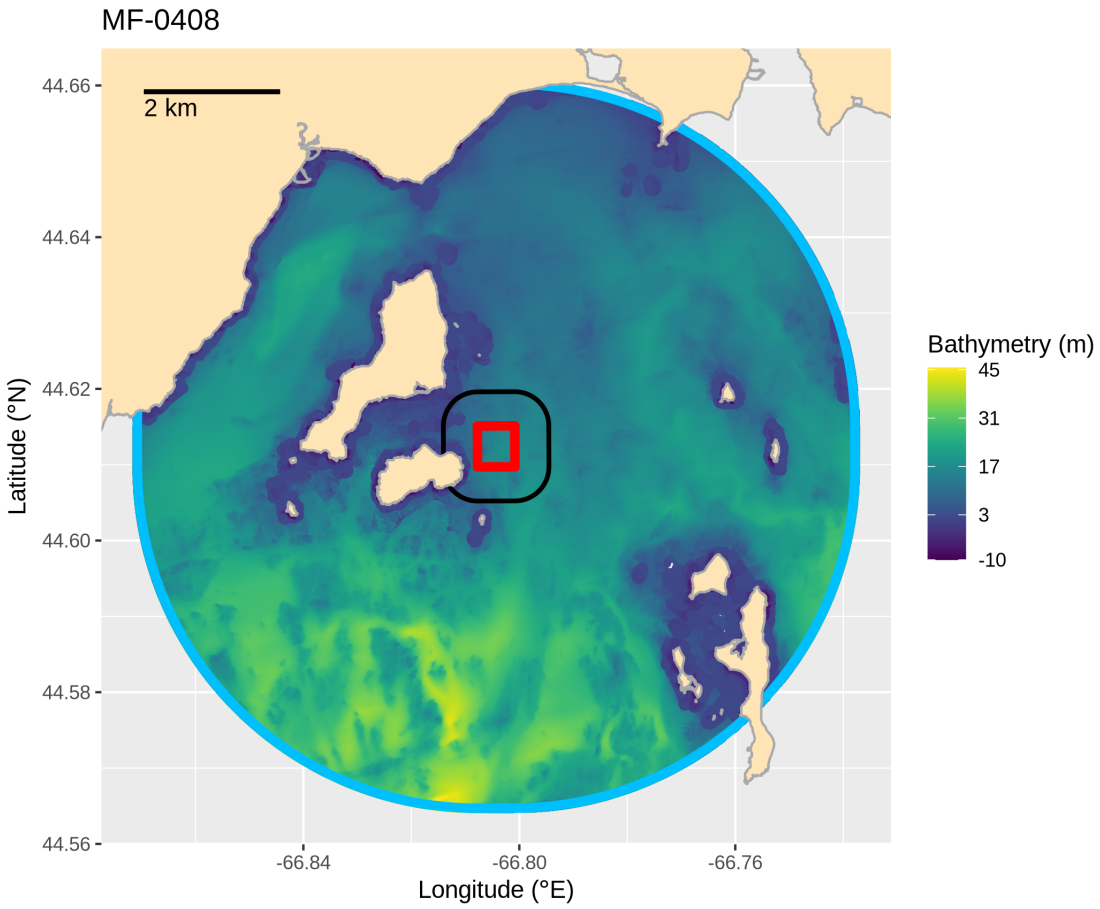


Figure 6.79.2. Farm MF-0408 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.80 Farm MF-0411

The lease centre for farm MF-0411 is 66.9653° W, 44.9271° N and the lease encompasses an area of 150144 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.80.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.80.2. Within the lease boundaries, the bathymetry ranges from 4 m to 29 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 57 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 123 m.

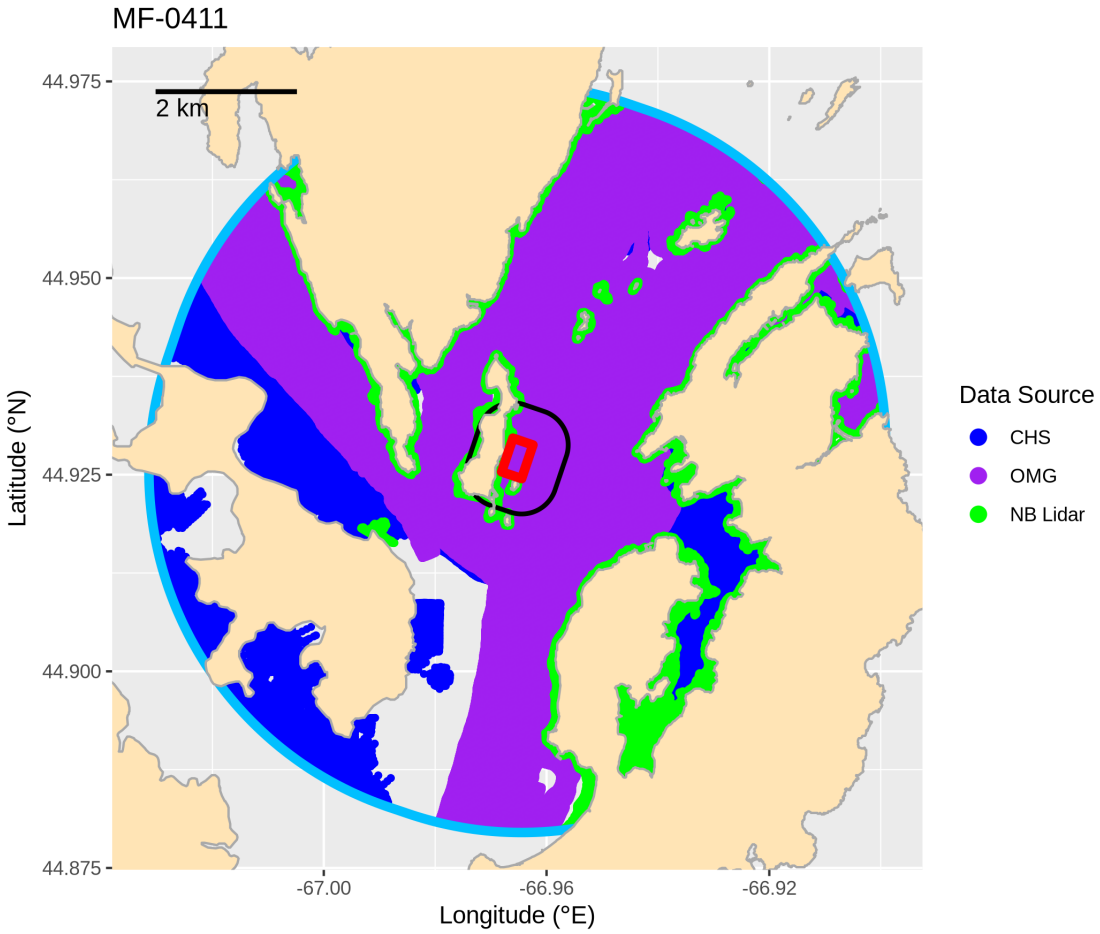


Figure 6.80.1. Farm MF-0411 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

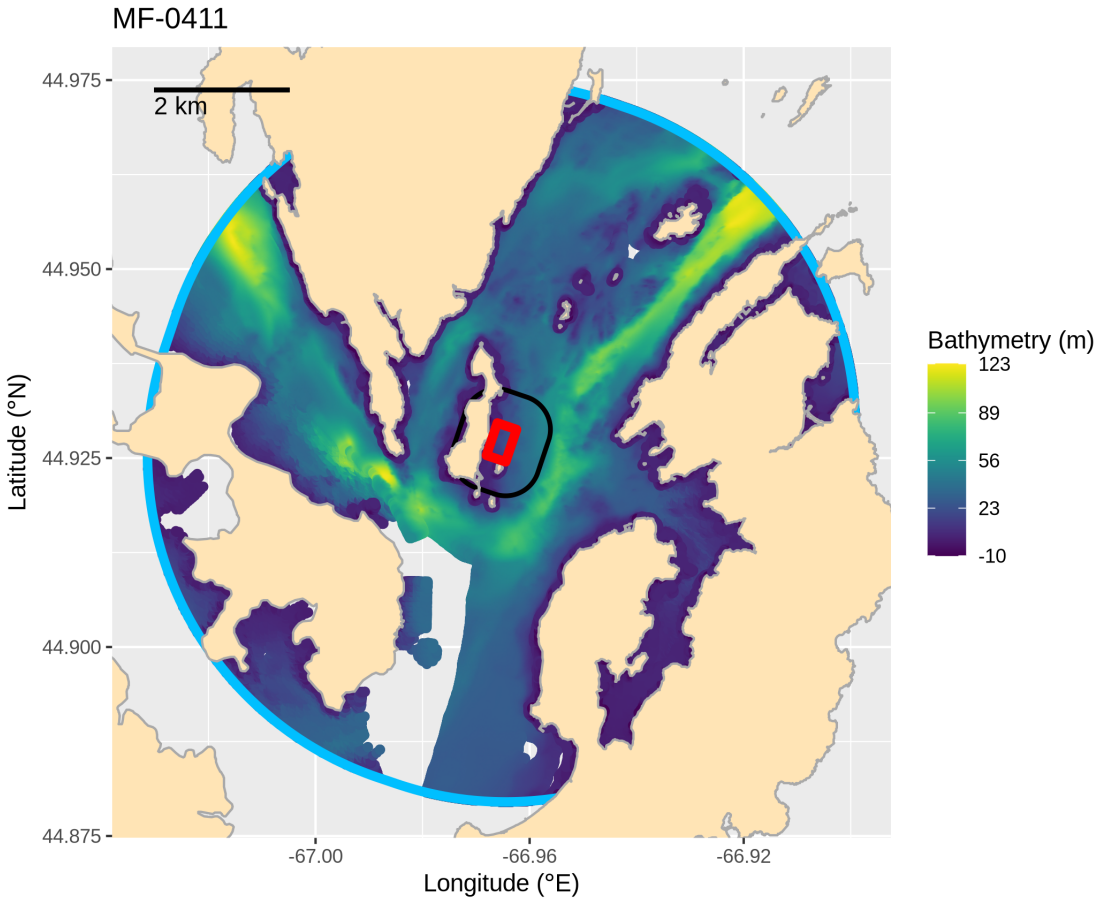


Figure 6.80.2. Farm MF-0411 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.81 Farm MF-0412

The lease centre for farm MF-0412 is 66.5784° W, 45.1026° N and the lease encompasses an area of 164976 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 2 bathymetric datasets. The locations of the data sources are shown in Figure 6.81.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.81.2. Within the lease boundaries, the bathymetry ranges from 9 m to 24 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 37 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 45 m.

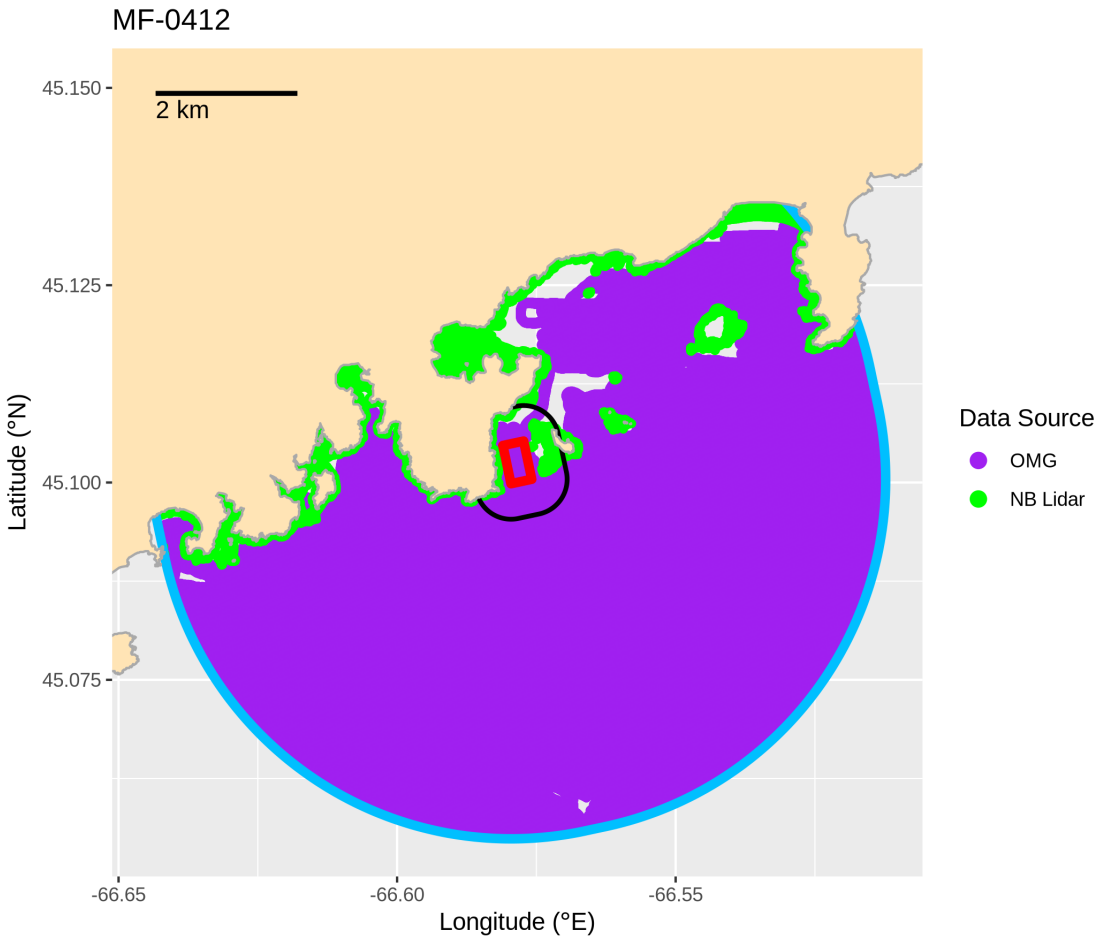


Figure 6.81.1. Farm MF-0412 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

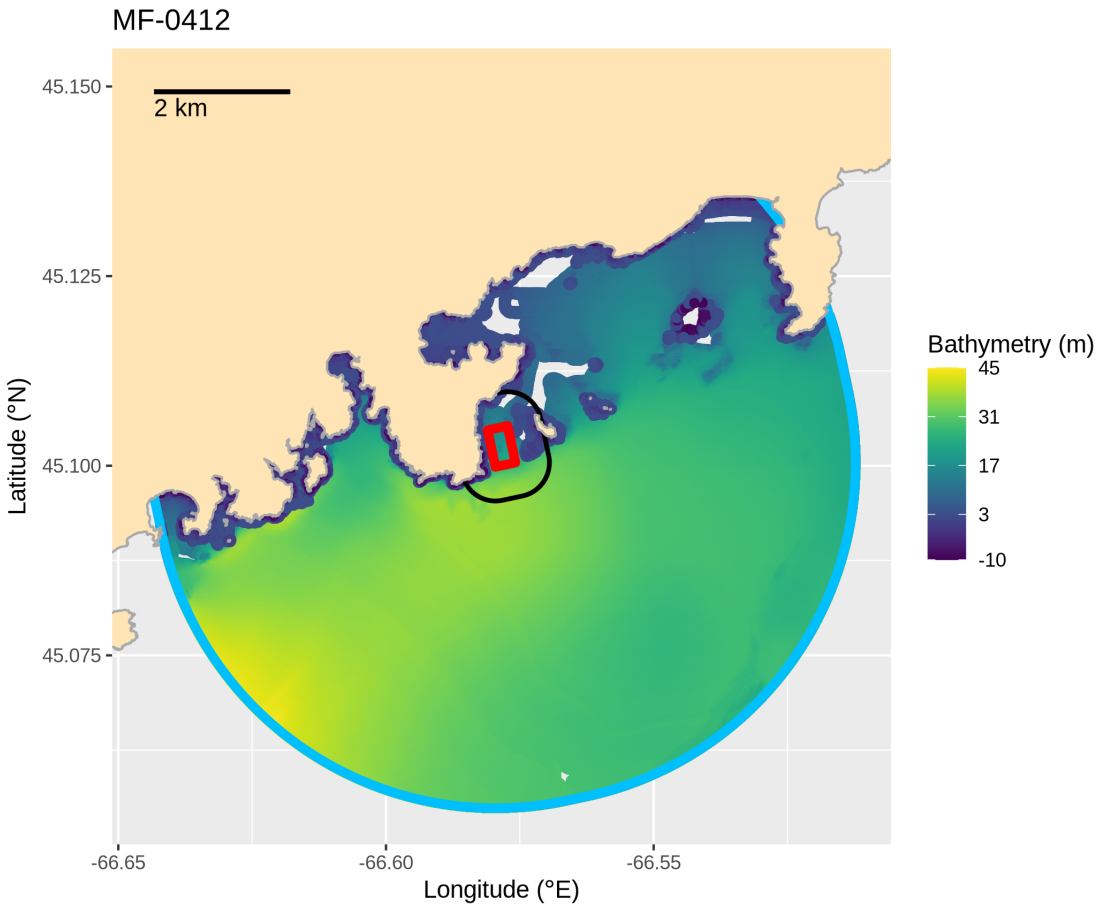


Figure 6.81.2. Farm MF-0412 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.82 Farm MF-0413

The lease centre for farm MF-0413 is 66.8724° W, 44.6068° N and the lease encompasses an area of 98546 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.82.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.82.2. Within the lease boundaries, the bathymetry ranges from 16 m to 20 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 23 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 88 m.

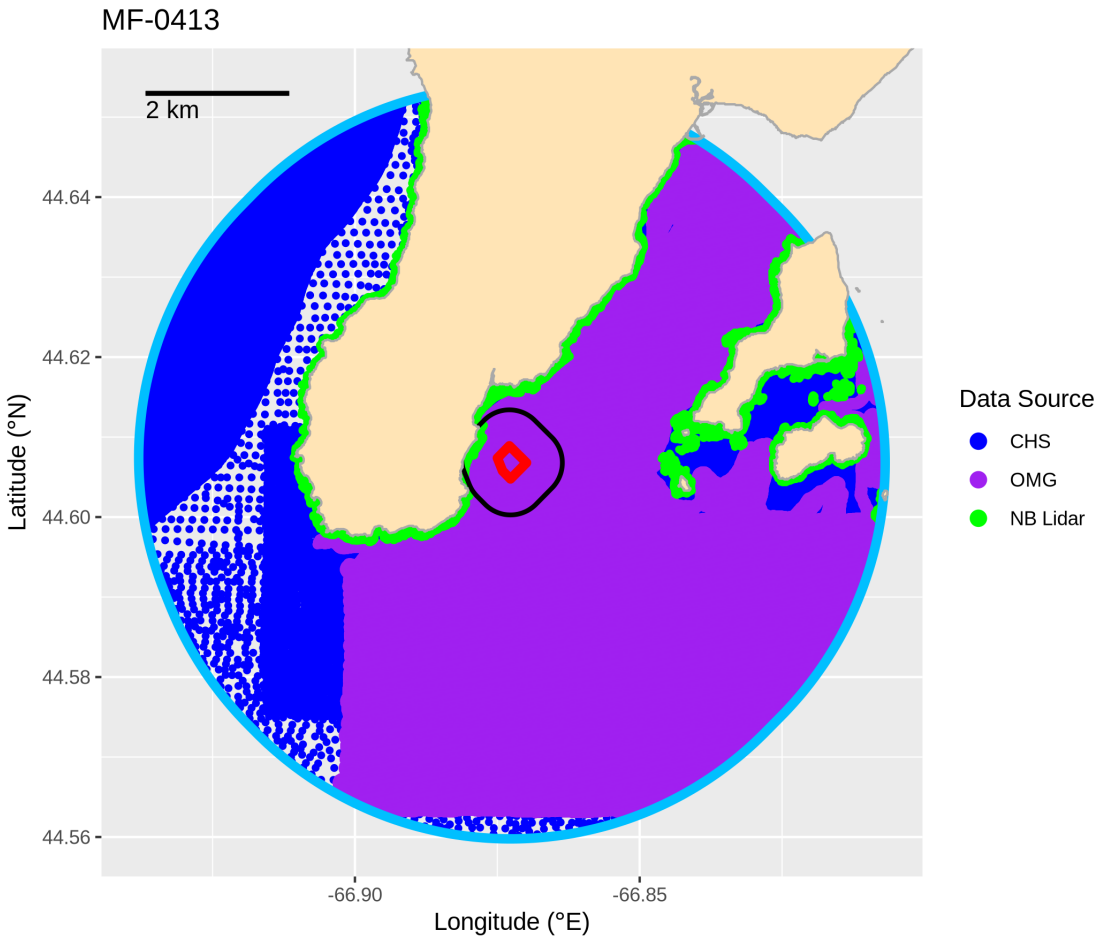


Figure 6.82.1. Farm MF-0413 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

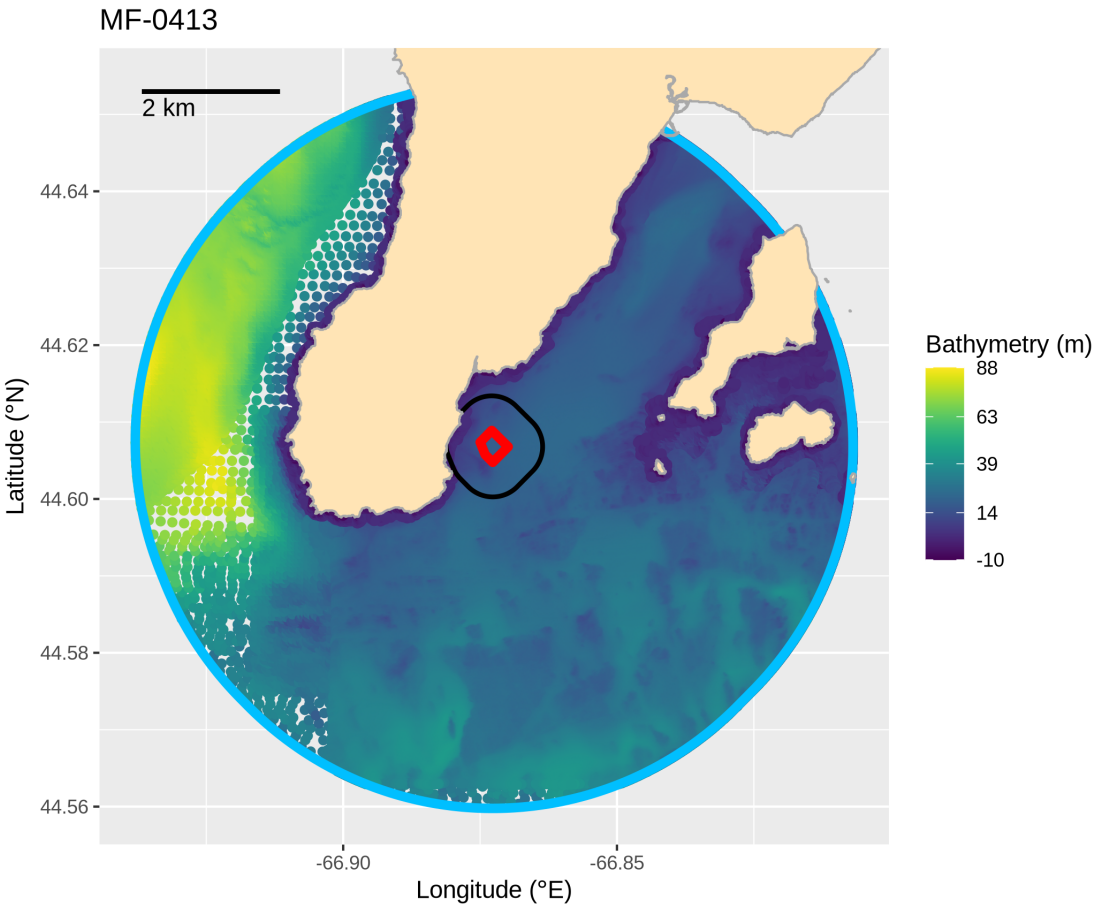


Figure 6.82.2. Farm MF-0413 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.83 Farm MF-0416

The lease centre for farm MF-0416 is 66.7001° W, 44.6133° N and the lease encompasses an area of 187569 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.83.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.83.2. Within the lease boundaries, the bathymetry ranges from 11 m to 17 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 19 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 105 m.

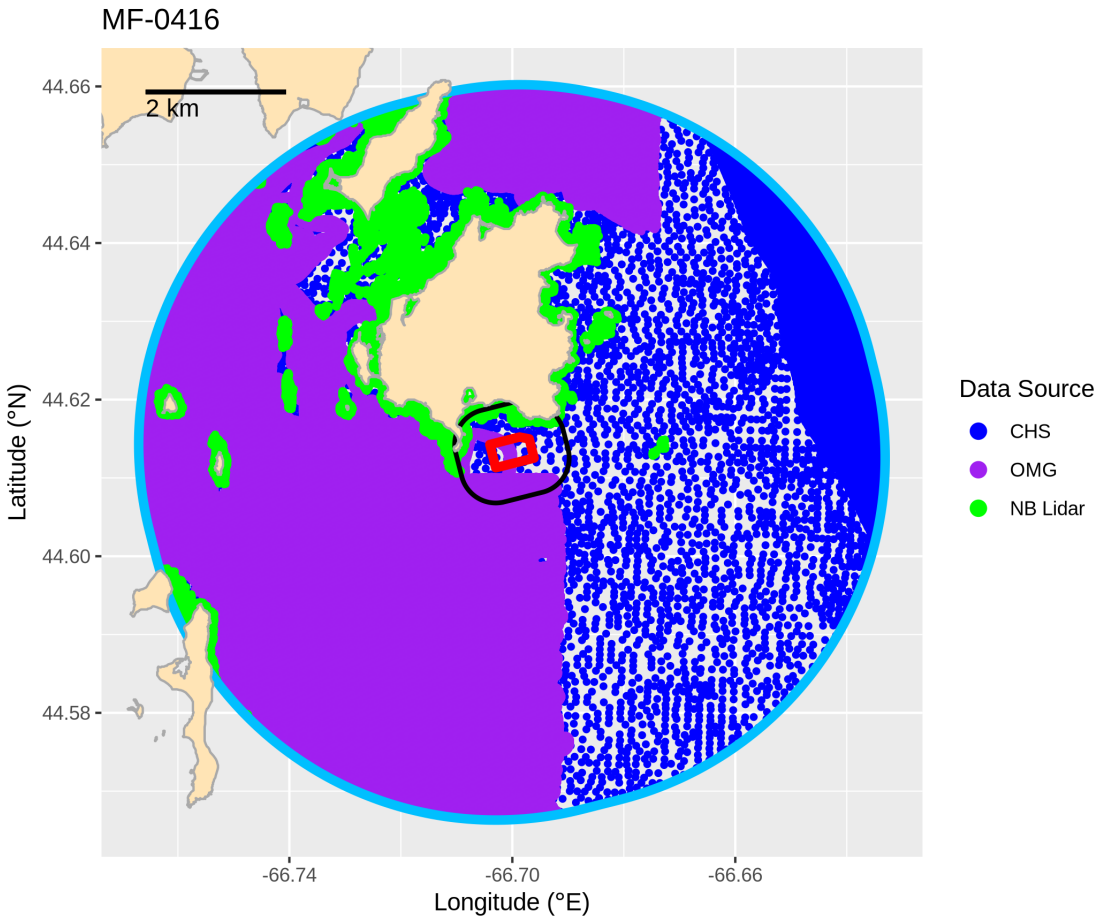


Figure 6.83.1. Farm MF-0416 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

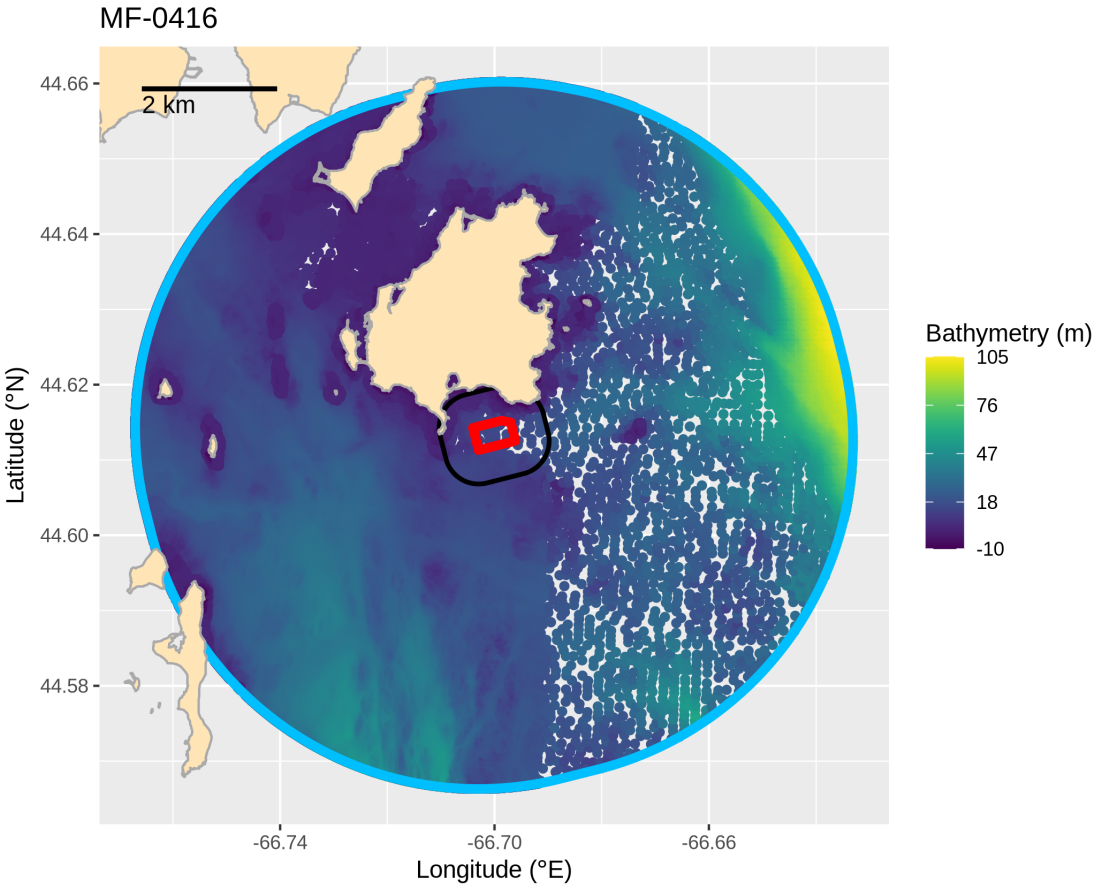


Figure 6.83.2. Farm MF-0416 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.84 Farm MF-0491

The lease centre for farm MF-0491 is 66.8272° W, 44.6118° N and the lease encompasses an area of 187790 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.84.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.84.2. Within the lease boundaries, the bathymetry ranges from 2 m to 20 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 21 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 46 m.

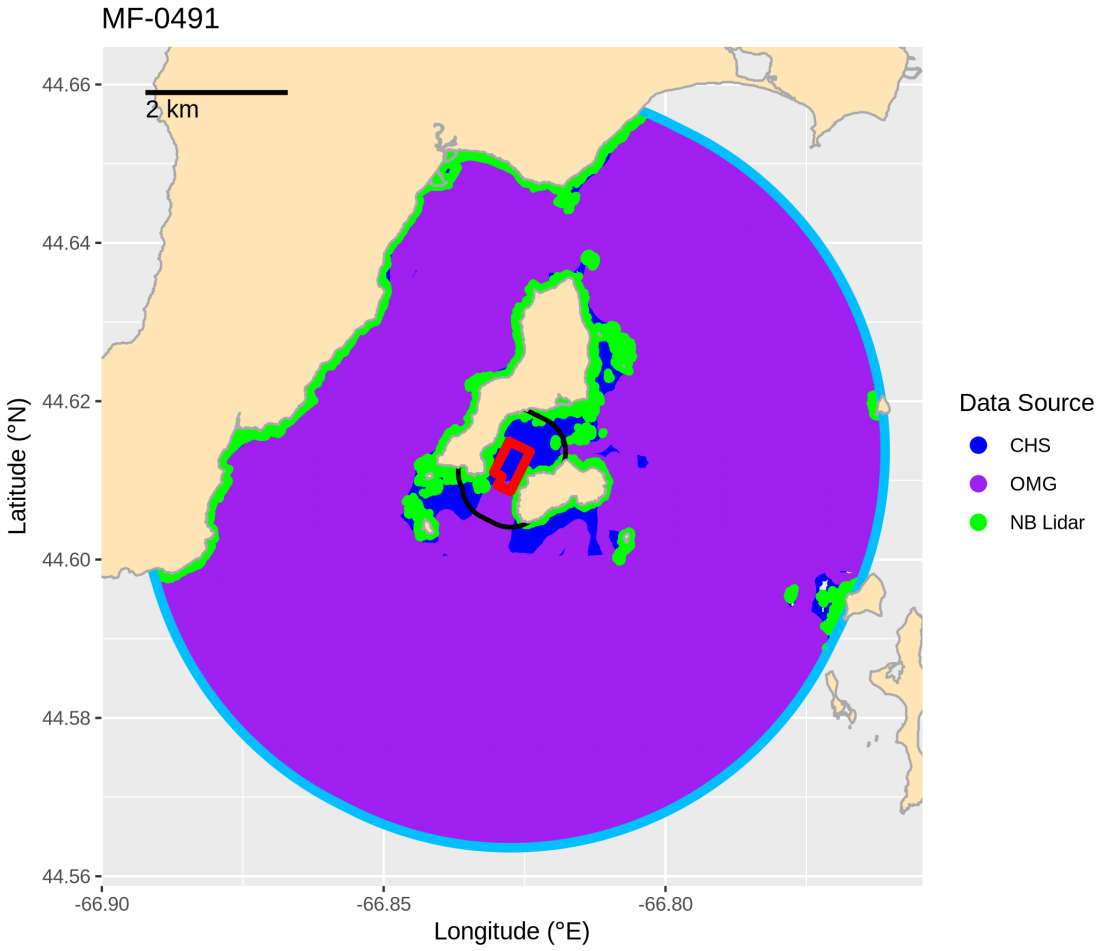


Figure 6.84.1. Farm MF-0491 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

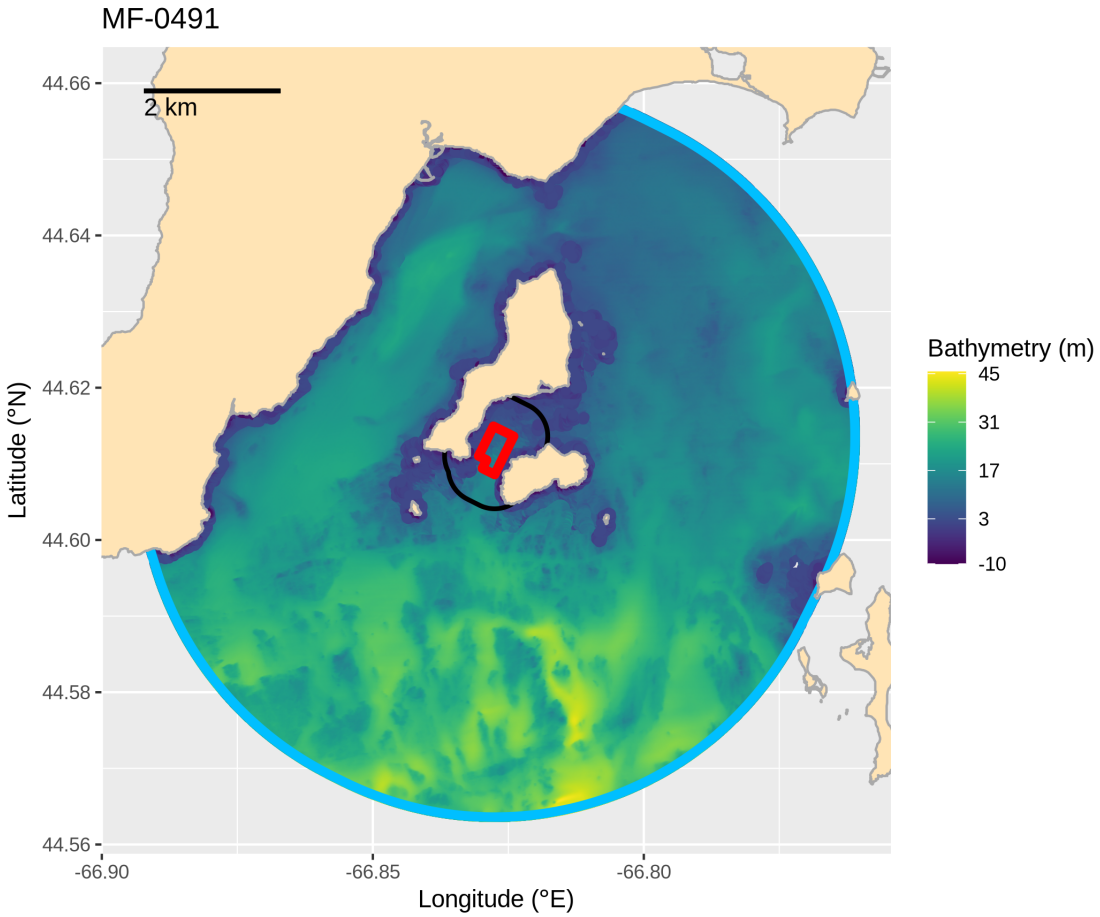


Figure 6.84.2. Farm MF-0491 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.85 Farm MF-0494

The lease centre for farm MF-0494 is 66.3191° W, 45.1238° N and the lease encompasses an area of 470304 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 2 bathymetric datasets. The locations of the data sources are shown in Figure 6.85.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.85.2. Within the lease boundaries, the bathymetry ranges from 0 m to 28 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 33 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 56 m.

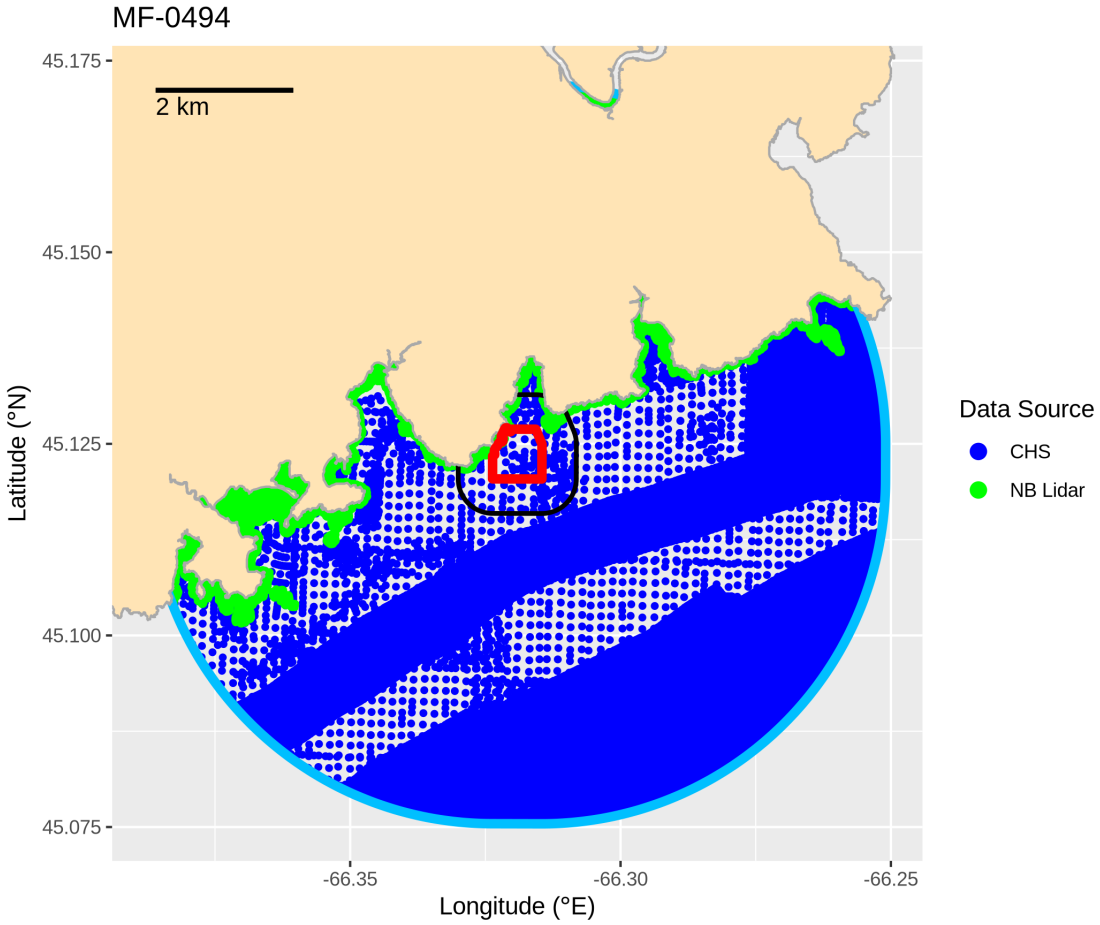


Figure 6.85.1. Farm MF-0494 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

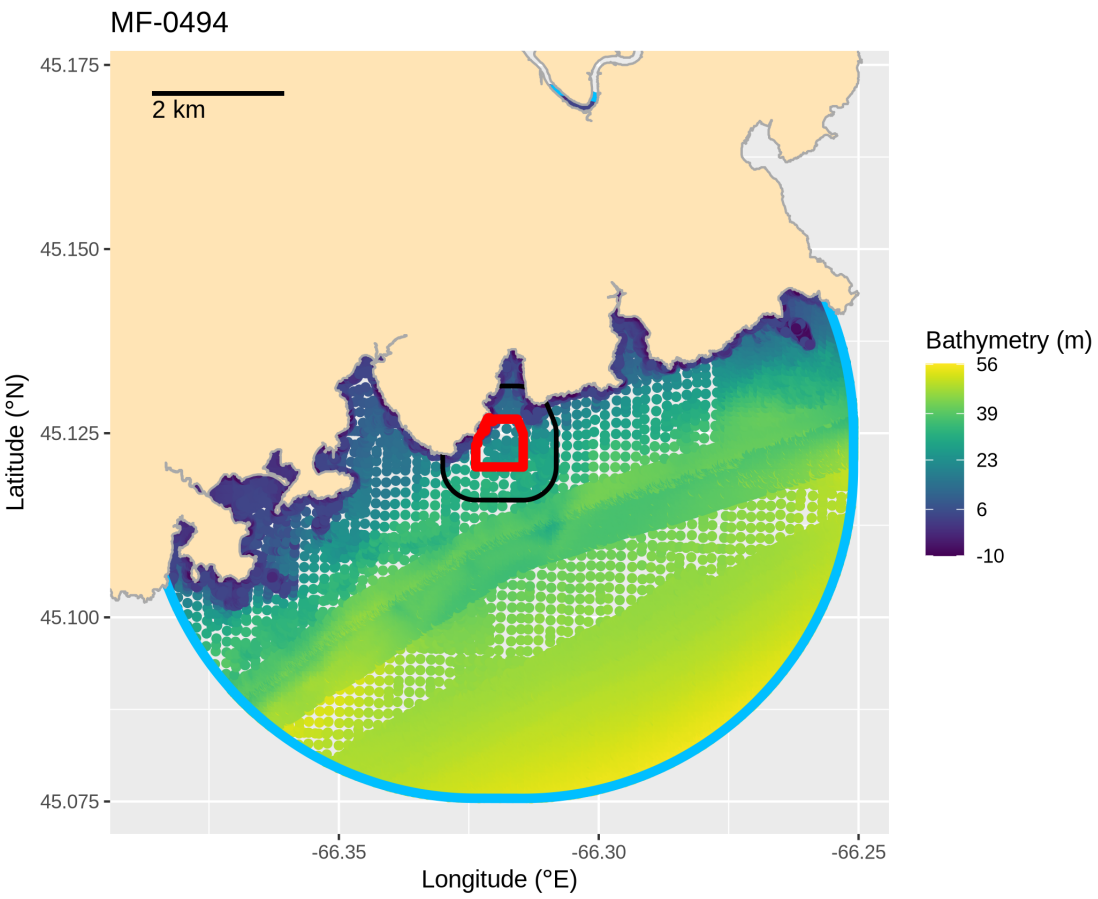


Figure 6.85.2. Farm MF-0494 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.86 Farm MF-0495

The lease centre for farm MF-0495 is 66.3775° W, 45.1024° N and the lease encompasses an area of 190186 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 2 bathymetric datasets. The locations of the data sources are shown in Figure 6.86.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.86.2. Within the lease boundaries, the bathymetry ranges from 5 m to 25 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 35 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 62 m.

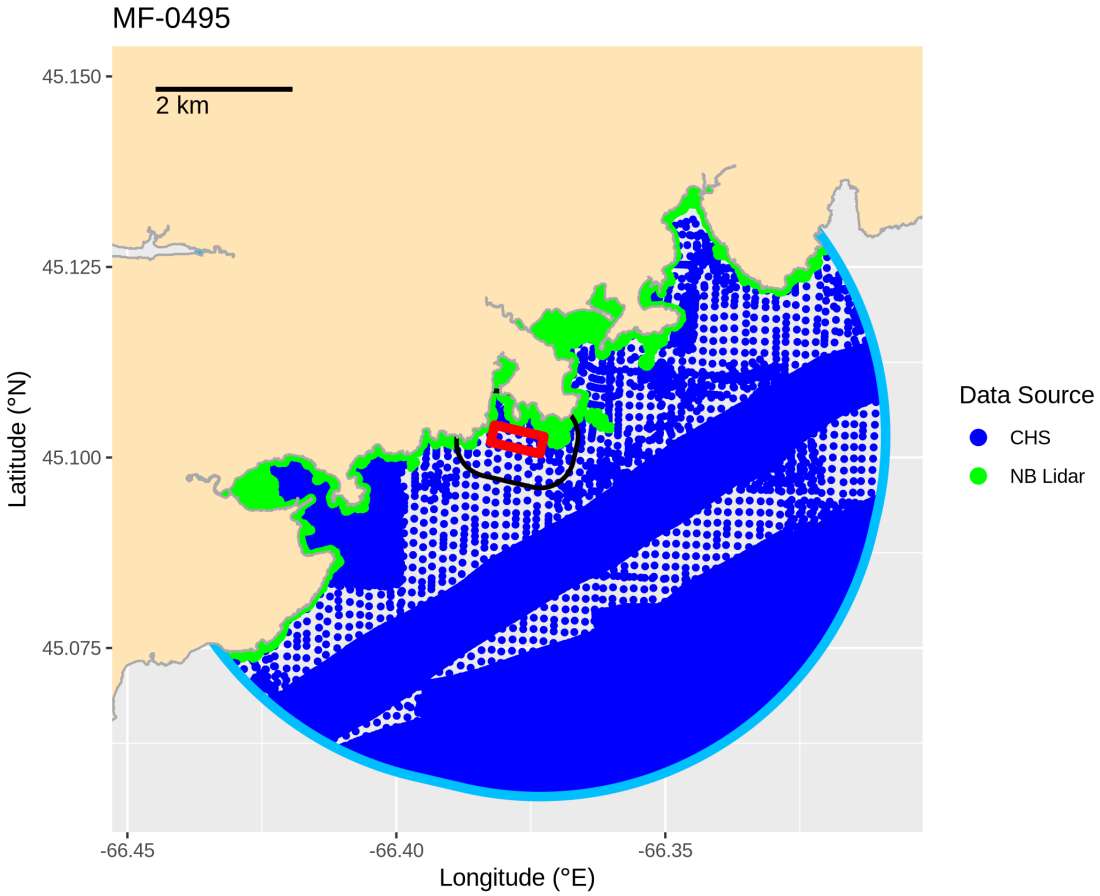


Figure 6.86.1. Farm MF-0495 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

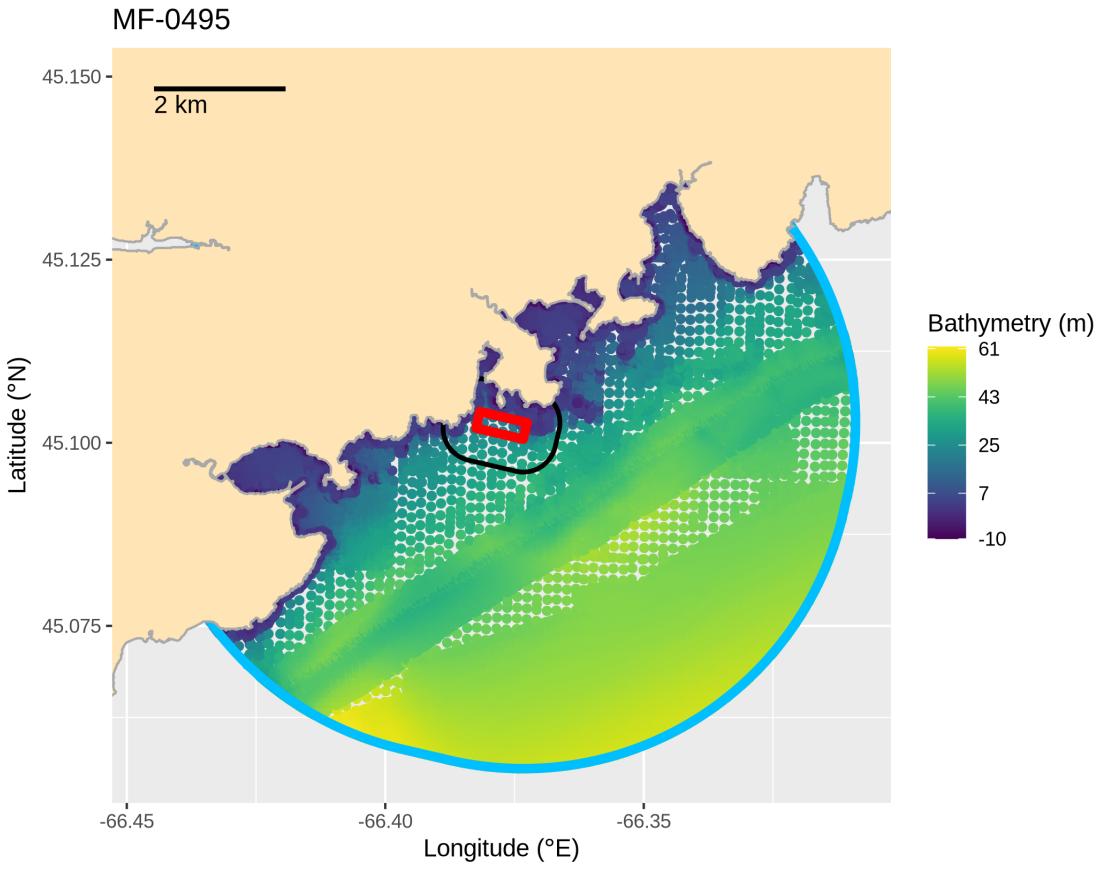


Figure 6.86.2. Farm MF-0495 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.87 Farm MF-0496

The lease centre for farm MF-0496 is 66.6683° W, 45.0651° N and the lease encompasses an area of 472148 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.87.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.87.2. Within the lease boundaries, the bathymetry ranges from 25 m to 46 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 50 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 68 m.

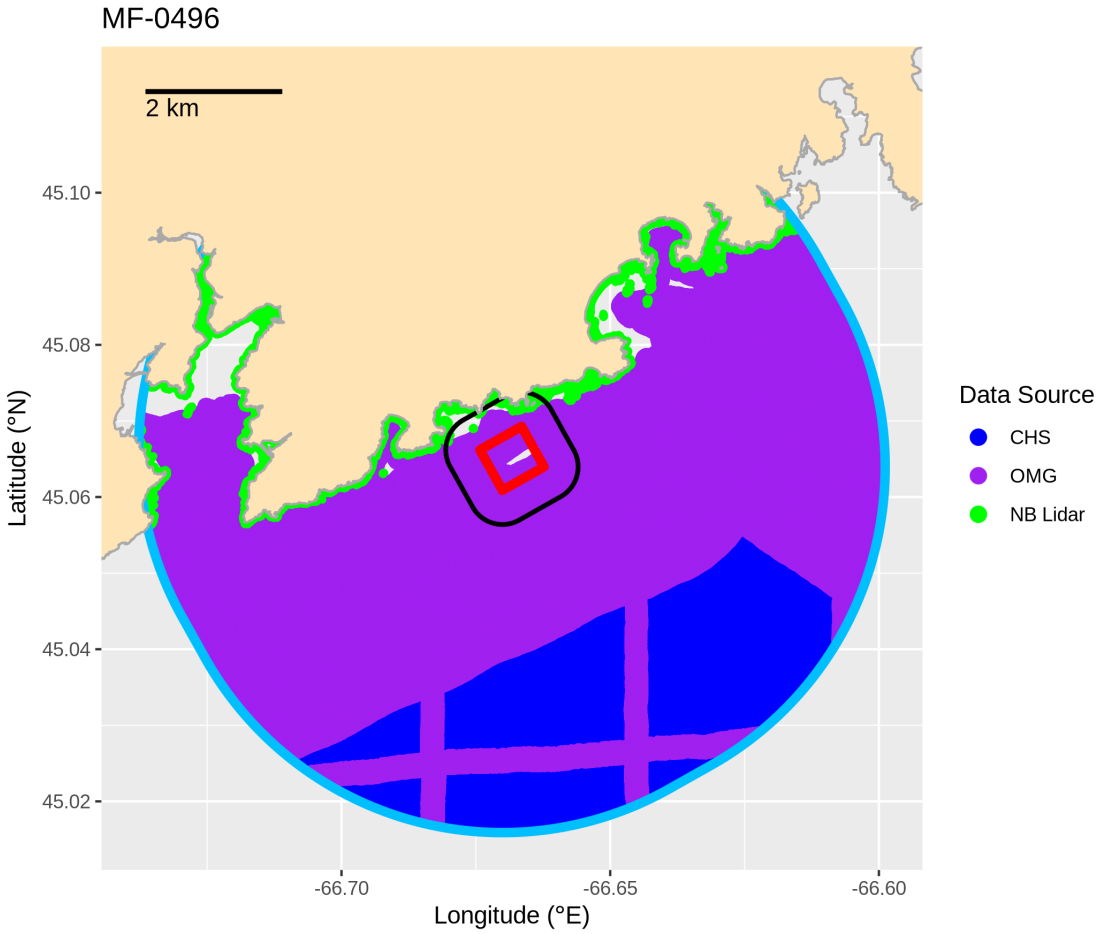


Figure 6.87.1. Farm MF-0496 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

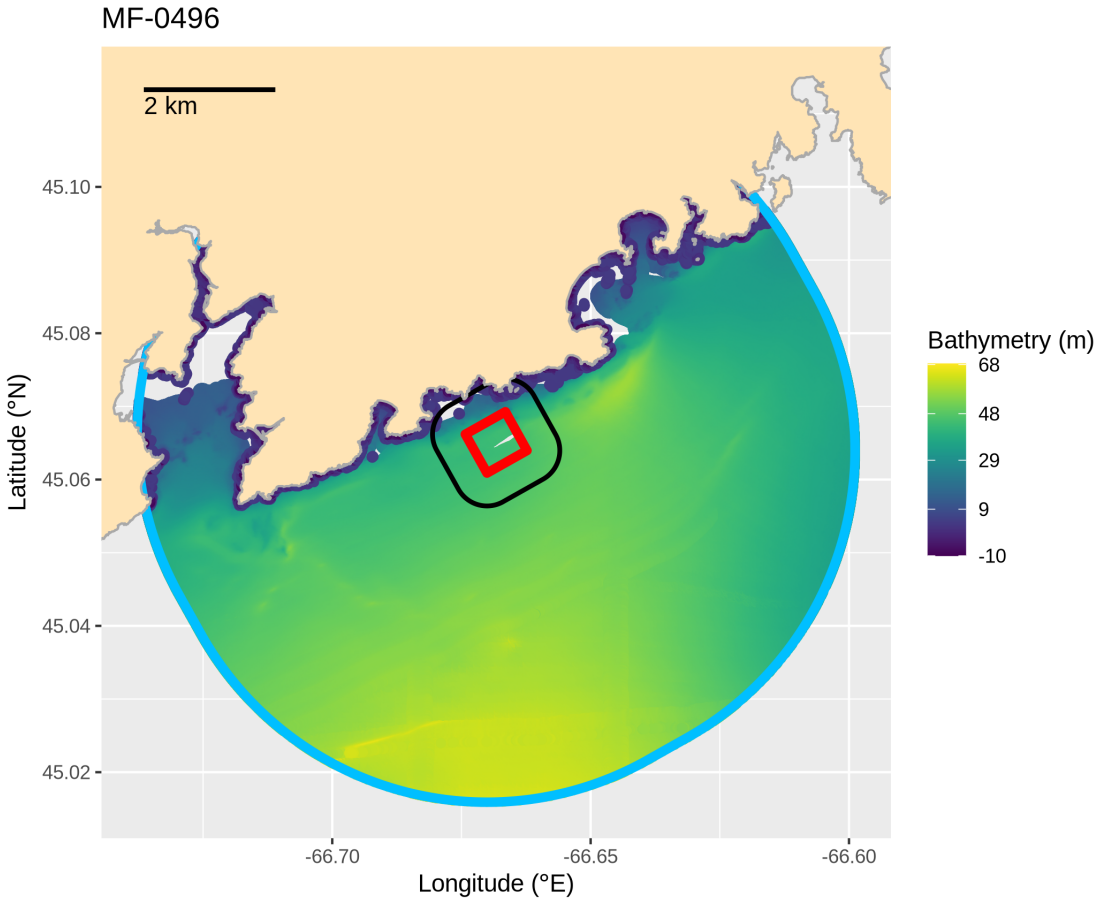


Figure 6.87.2. Farm MF-0496 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.88 Farm MF-0501

The lease centre for farm MF-0501 is 66.4354° W, 45.0700° N and the lease encompasses an area of 349966 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.88.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.88.2. Within the lease boundaries, the bathymetry ranges from 13 m to 30 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 41 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 81 m.

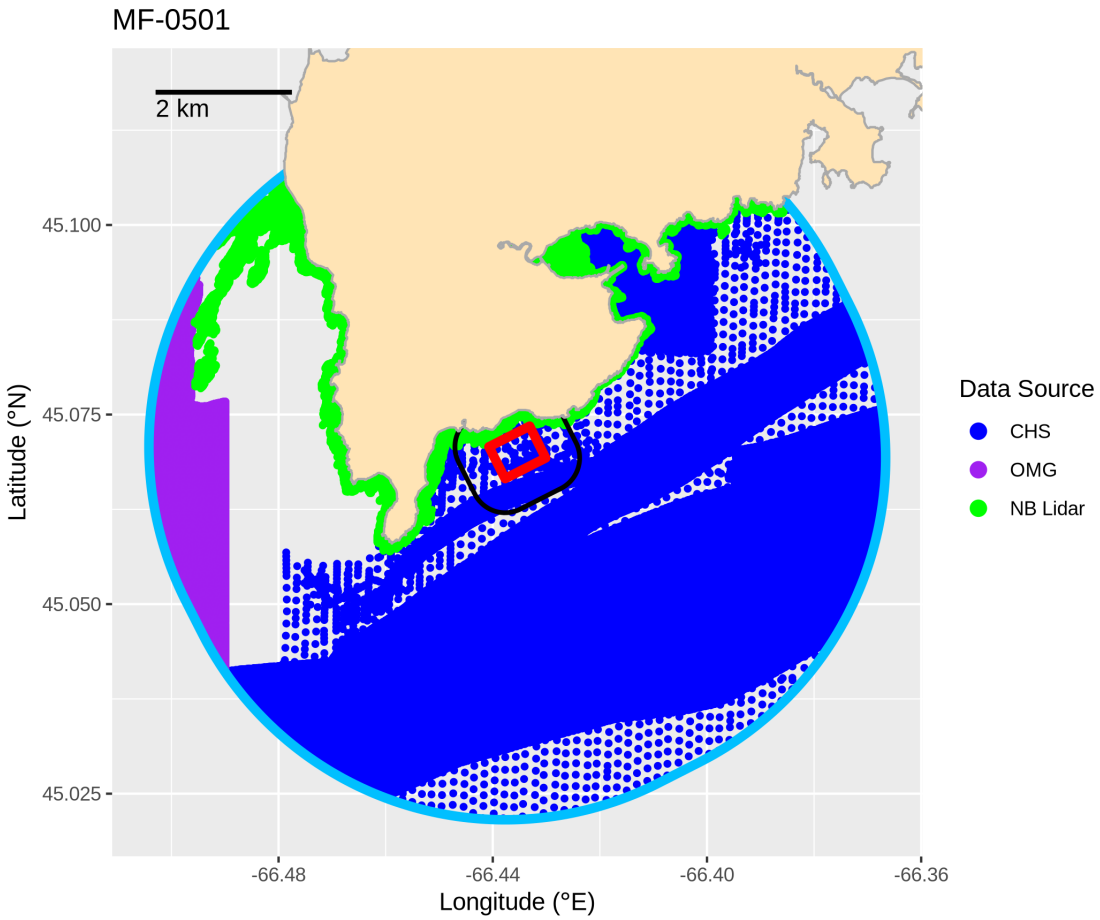


Figure 6.88.1. Farm MF-0501 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

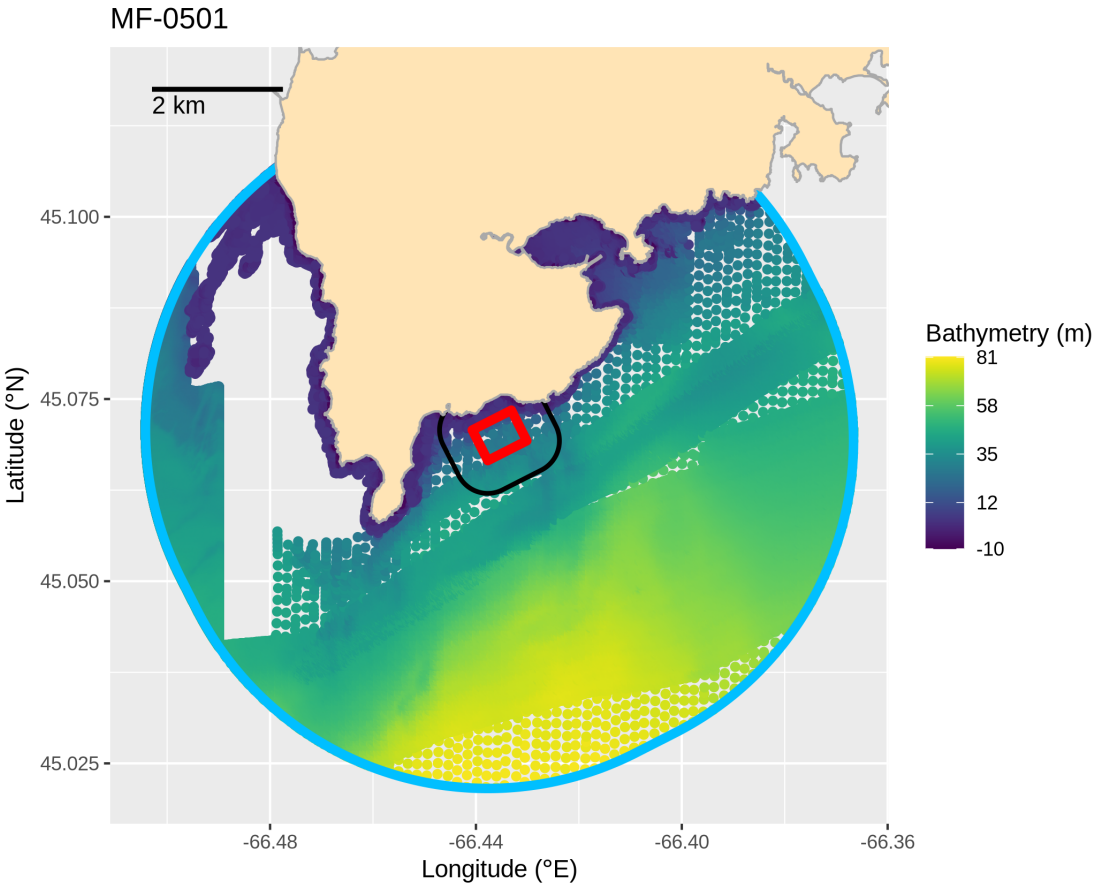


Figure 6.88.2. Farm MF-0501 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.89 Farm MF-0502

The lease centre for farm MF-0502 is 66.9892° W, 45.1137° N and the lease encompasses an area of 374956 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.89.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.89.2. Within the lease boundaries, the bathymetry ranges from 27 m to 37 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from 12 m to 45 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 82 m.

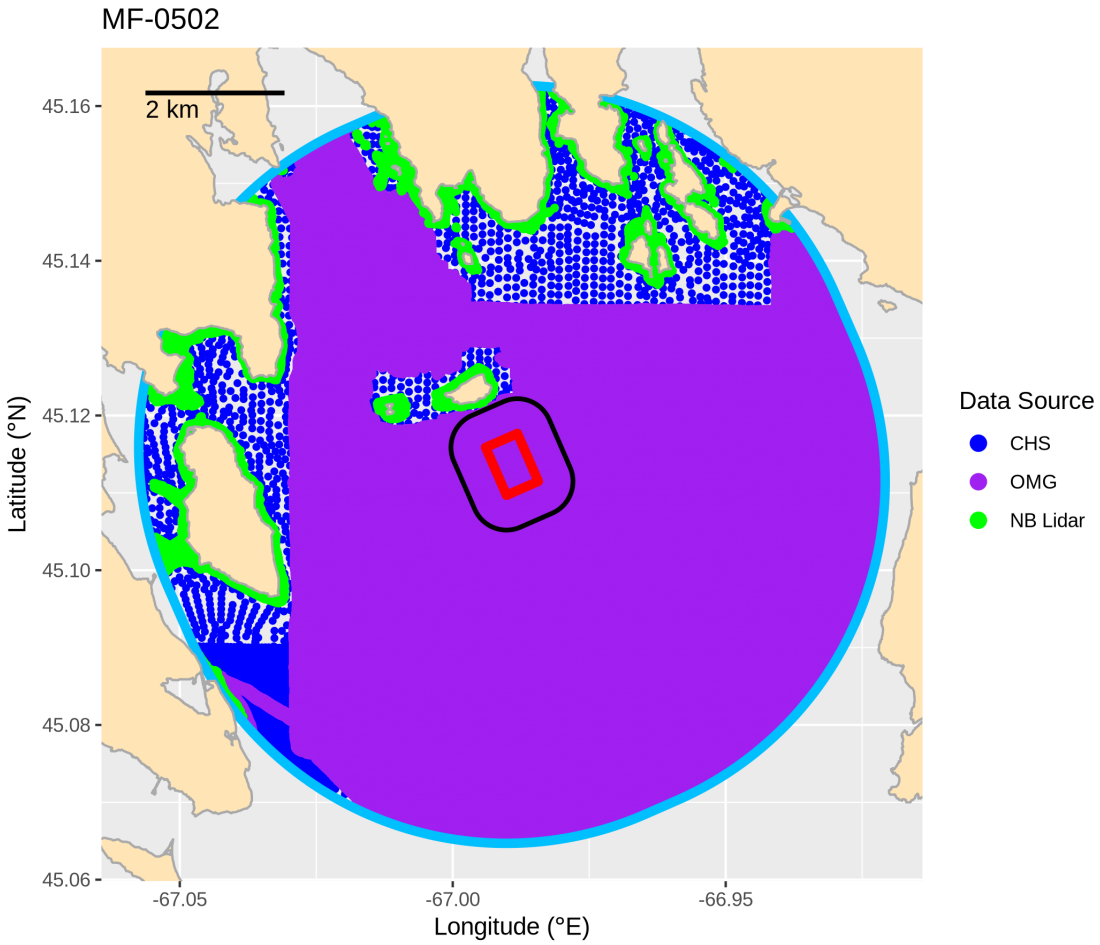


Figure 6.89.1. Farm MF-0502 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

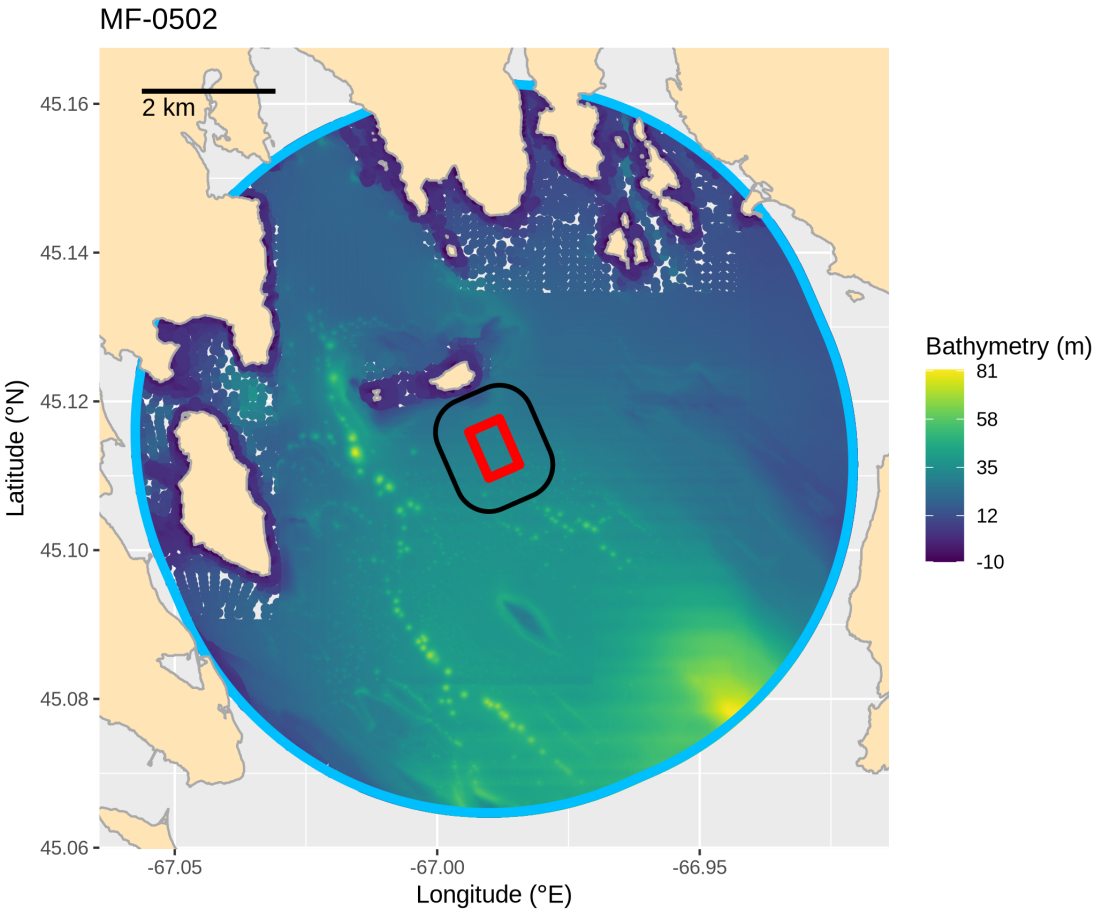


Figure 6.89.2. Farm MF-0502 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.90 Farm MF-0503

The lease centre for farm MF-0503 is 66.7078° W, 44.6569° N and the lease encompasses an area of 264876 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.90.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.90.2. Within the lease boundaries, the bathymetry ranges from 10 m to 22 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 22 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 118 m.

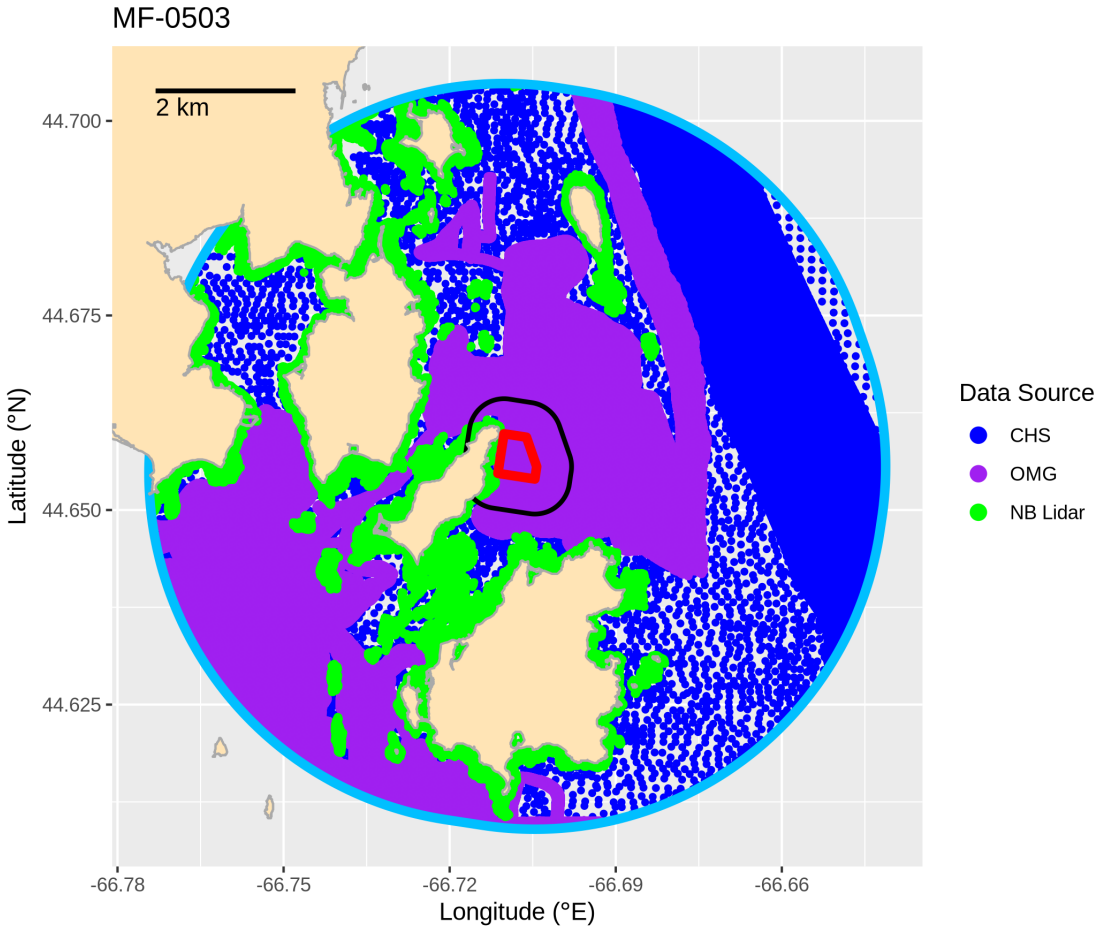


Figure 6.90.1. Farm MF-0503 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

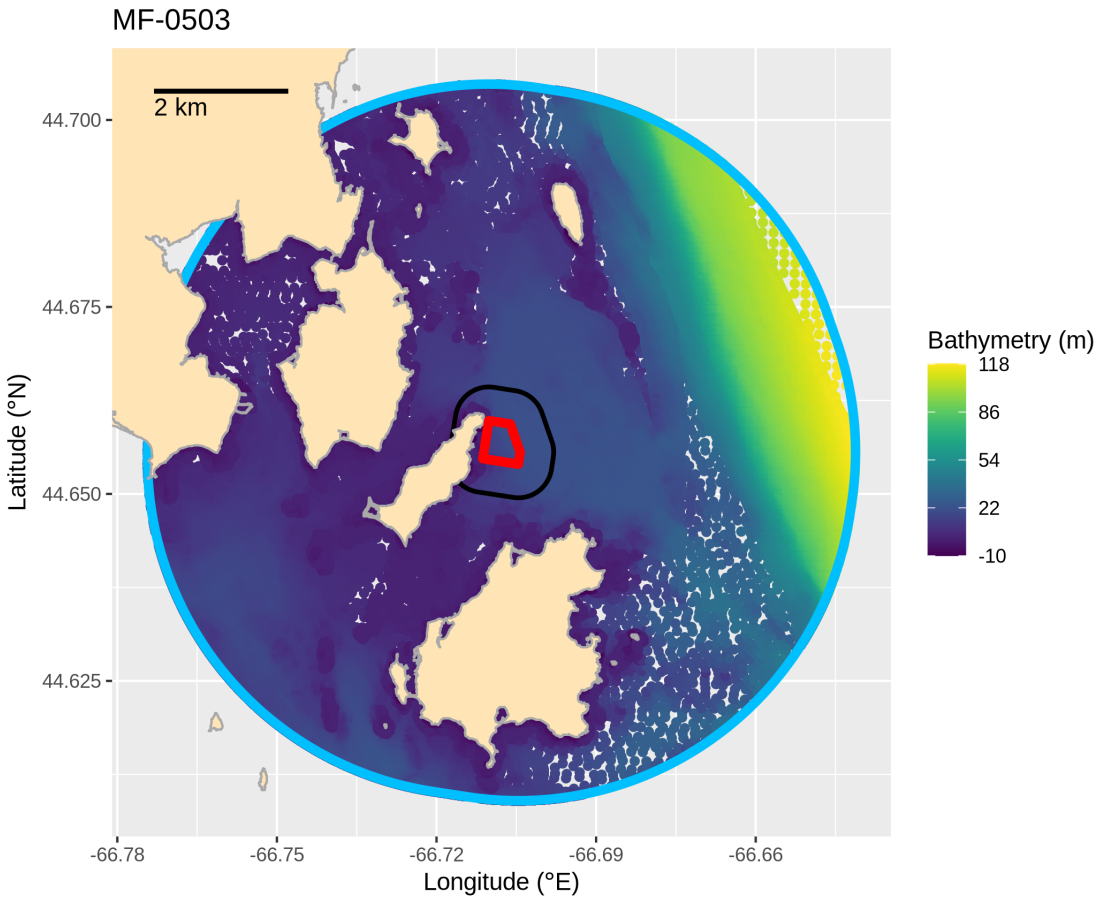


Figure 6.90.2. Farm MF-0503 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.91 Farm MF-0504

The lease centre for farm MF-0504 is 66.9605° W, 45.1306° N and the lease encompasses an area of 374954 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.91.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.91.2. Within the lease boundaries, the bathymetry ranges from 17 m to 21 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -4 m to 26 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 79 m.

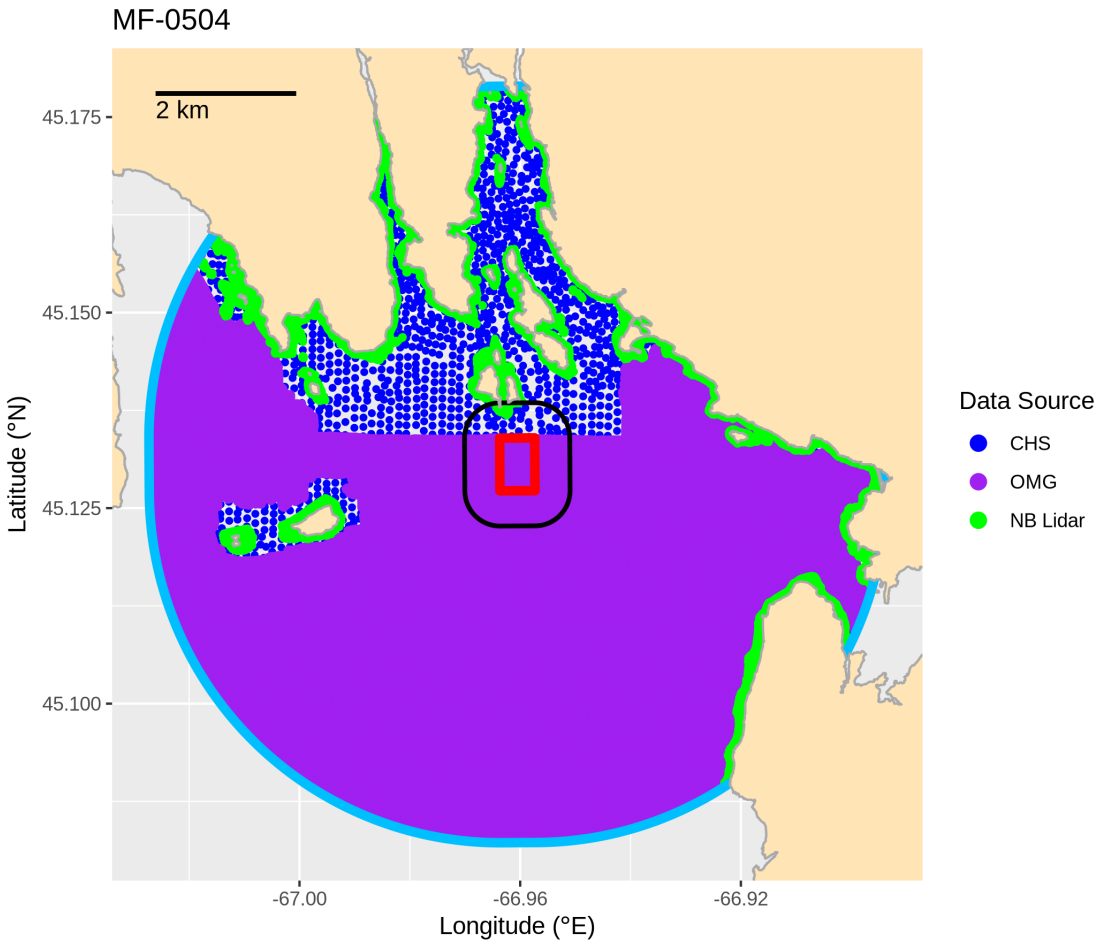


Figure 6.91.1. Farm MF-0504 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

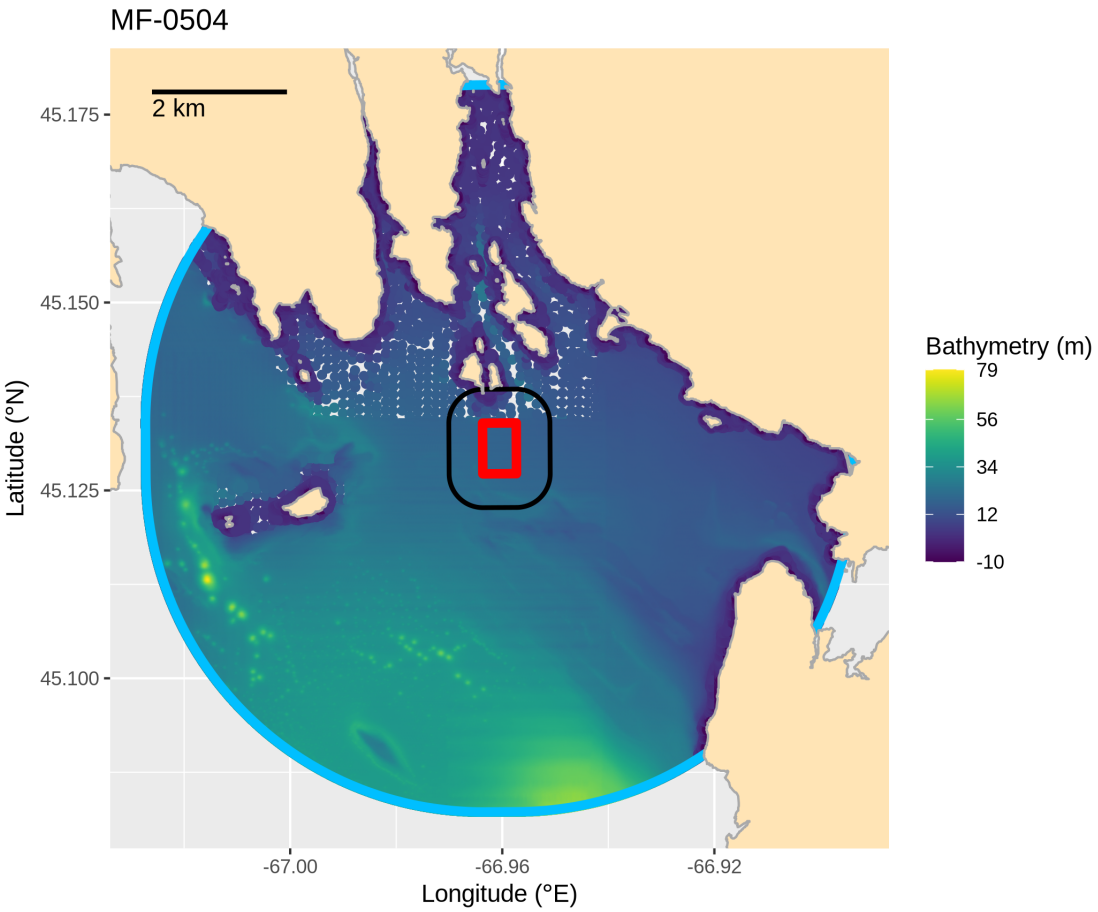


Figure 6.91.2. Farm MF-0504 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.92 Farm MF-0507

The lease centre for farm MF-0507 is 66.6132° W, 45.0920° N and the lease encompasses an area of 349962 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.92.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.92.2. Within the lease boundaries, the bathymetry ranges from 29 m to 38 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 38 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 57 m.

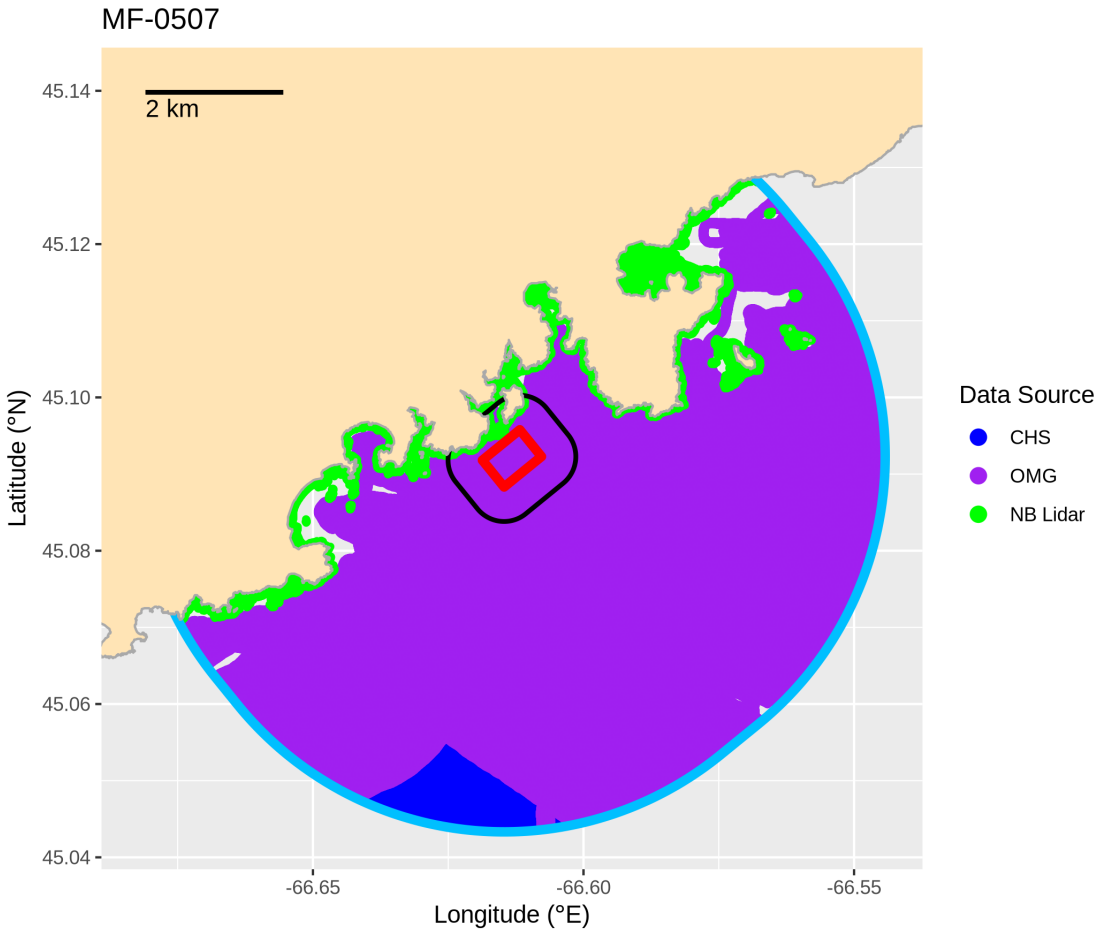


Figure 6.92.1. Farm MF-0507 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

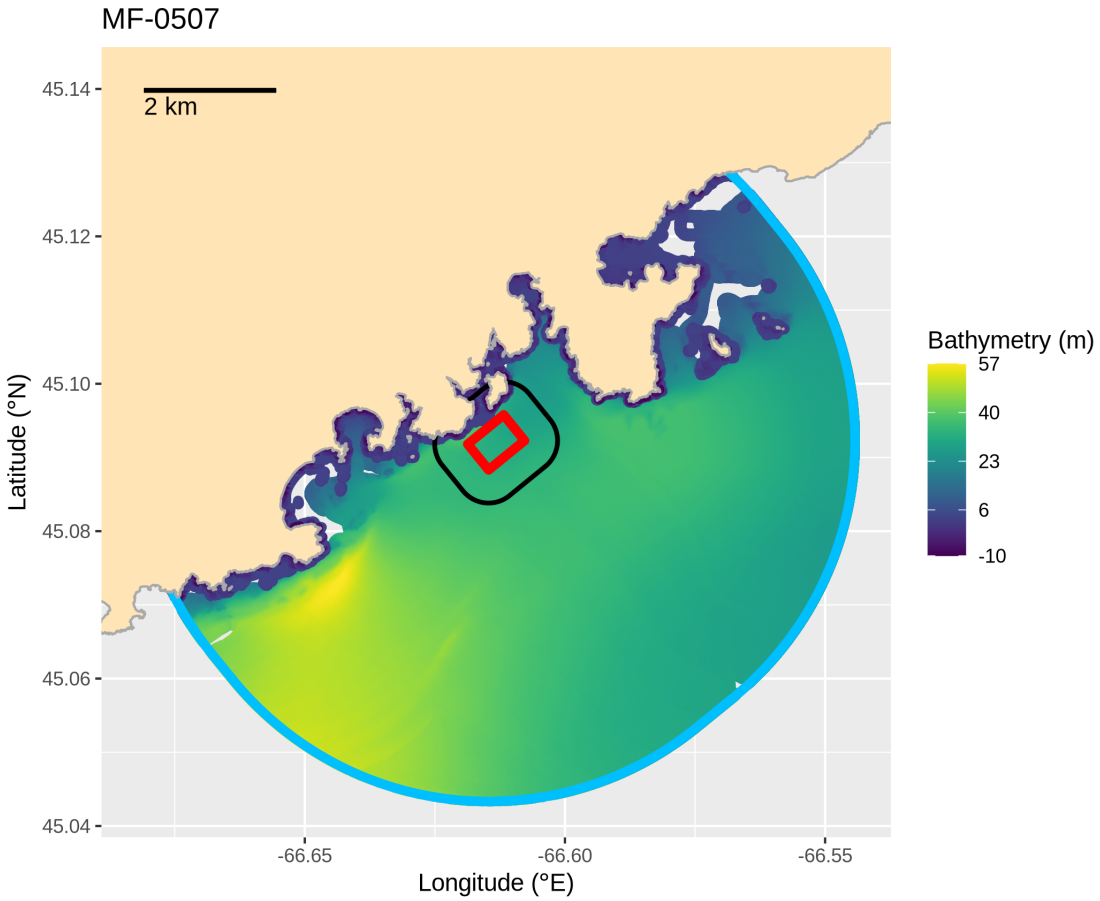


Figure 6.92.2. Farm MF-0507 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.93 Farm MF-0508

The lease centre for farm MF-0508 is 66.7111° W, 45.0542° N and the lease encompasses an area of 337457 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.93.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.93.2. Within the lease boundaries, the bathymetry ranges from 33 m to 49 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 54 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 71 m.

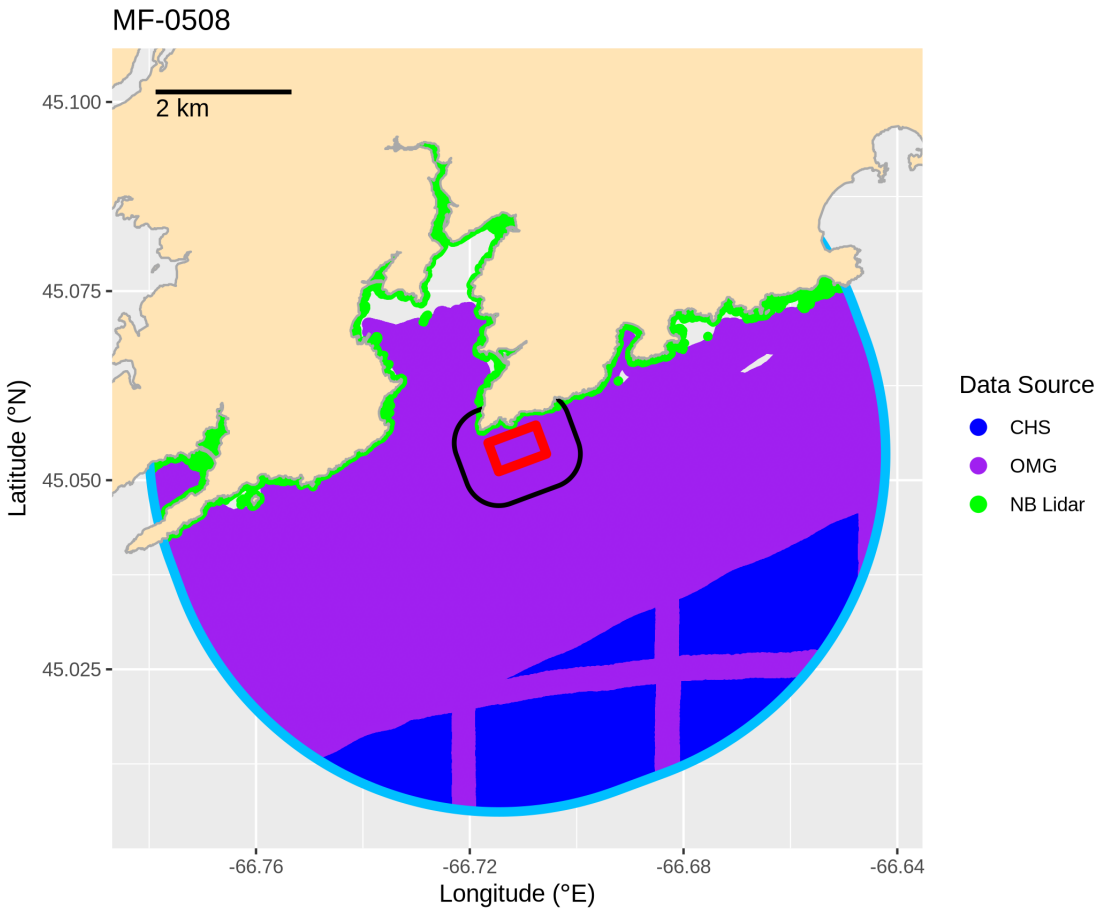


Figure 6.93.1. Farm MF-0508 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

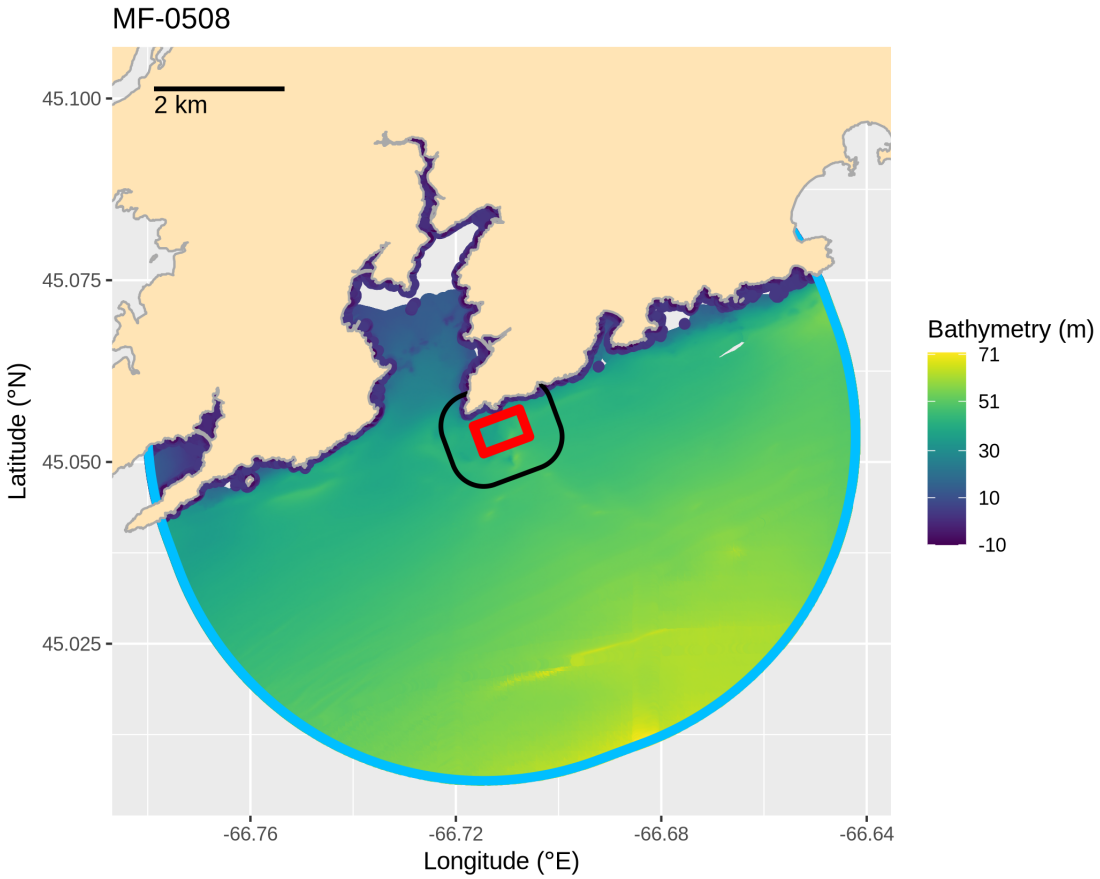


Figure 6.93.2. Farm MF-0508 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.94 Farm MF-0509

The lease centre for farm MF-0509 is 66.7211° W, 45.0604° N and the lease encompasses an area of 179985 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 3 bathymetric datasets. The locations of the data sources are shown in Figure 6.94.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.94.2. Within the lease boundaries, the bathymetry ranges from 15 m to 28 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 41 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 68 m.

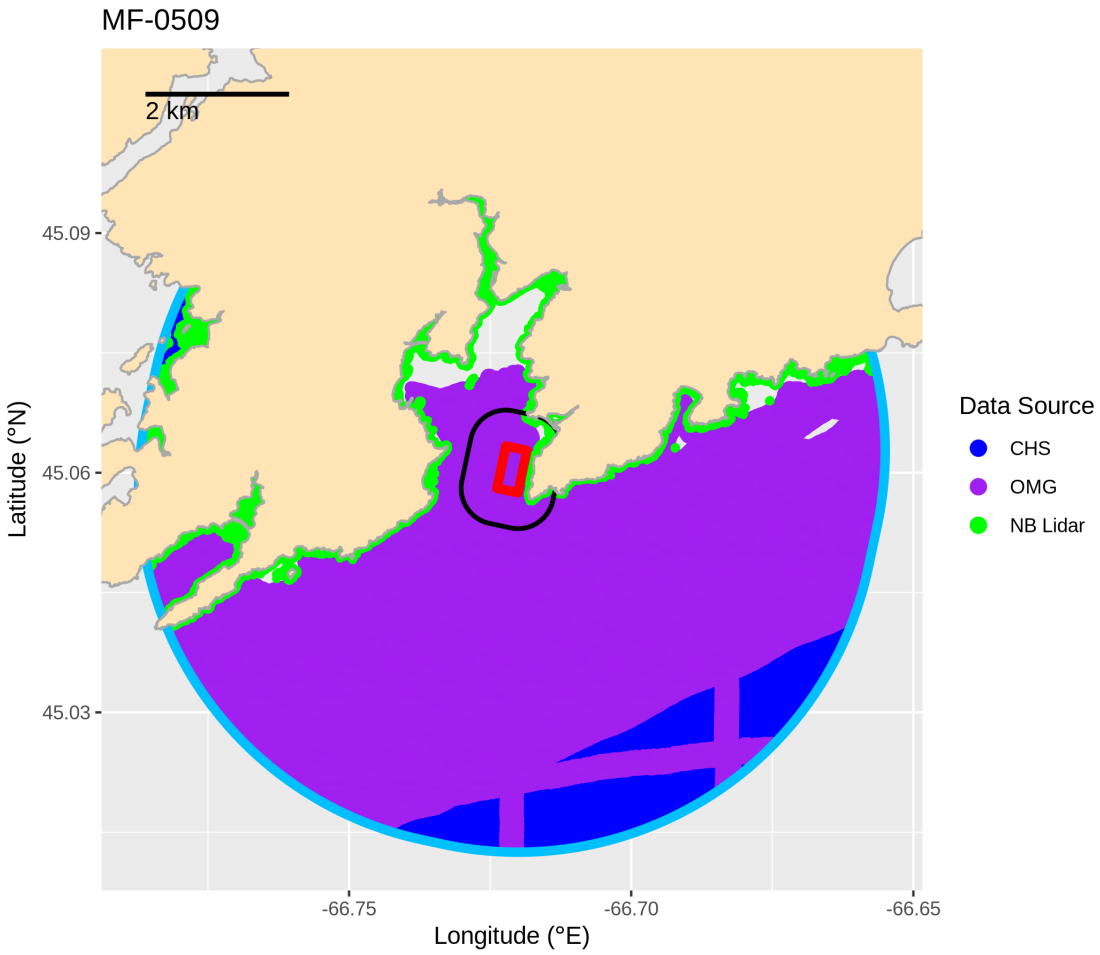


Figure 6.94.1. Farm MF-0509 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

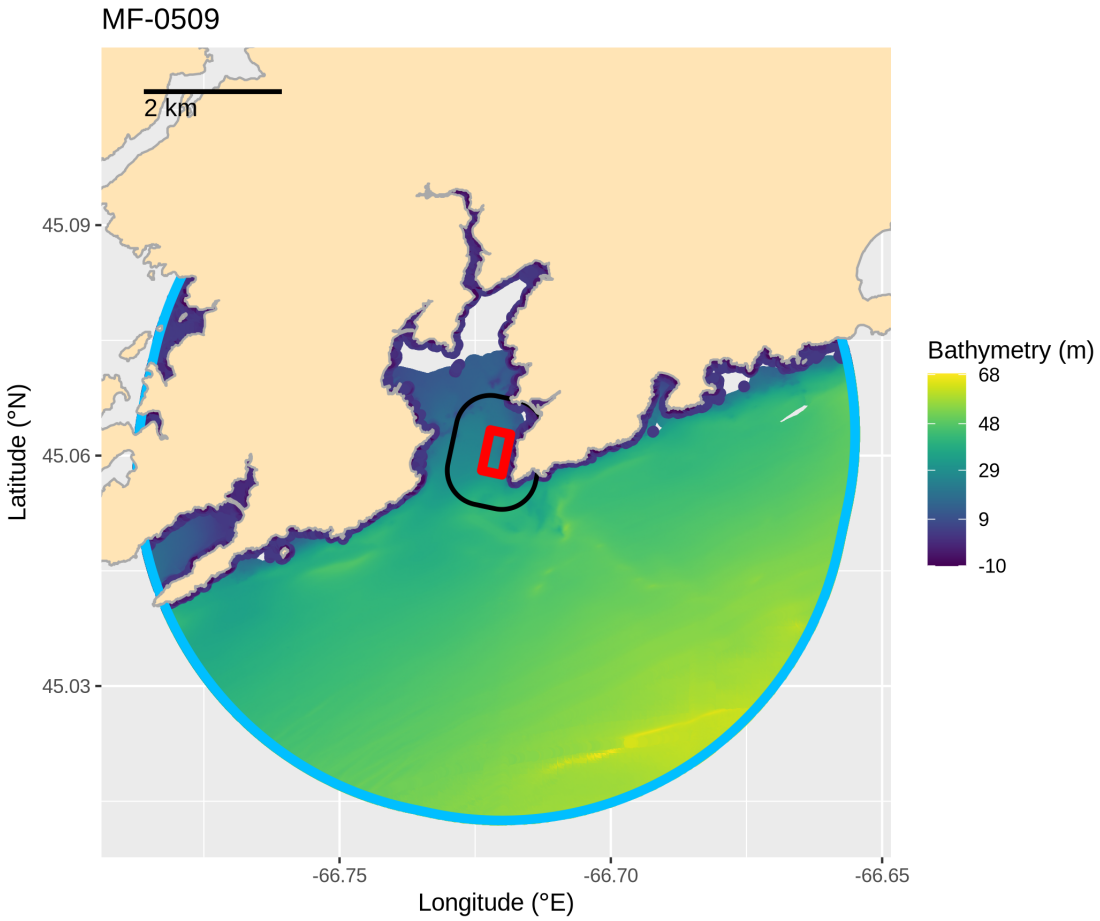


Figure 6.94.2. Farm MF-0509 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.

6.95 Farm MF-0510

The lease centre for farm MF-0510 is 66.5397° W, 45.1066° N and the lease encompasses an area of 499954 m^2. Within a 5 km buffer zone from the farm lease boundaries, data were found from 2 bathymetric datasets. The locations of the data sources are shown in Figure 6.95.1. The bathymetry within a 5 km buffer zone of the lease boundaries is shown in Figure 6.95.2. Within the lease boundaries, the bathymetry ranges from 10 m to 27 m. Within a 500 m buffer zone of the lease boundaries, the bathymetry ranges from 6 m to 28 m. Within a 5 km buffer zone of the lease boundaries, the bathymetry ranges from -10 m to 39 m.

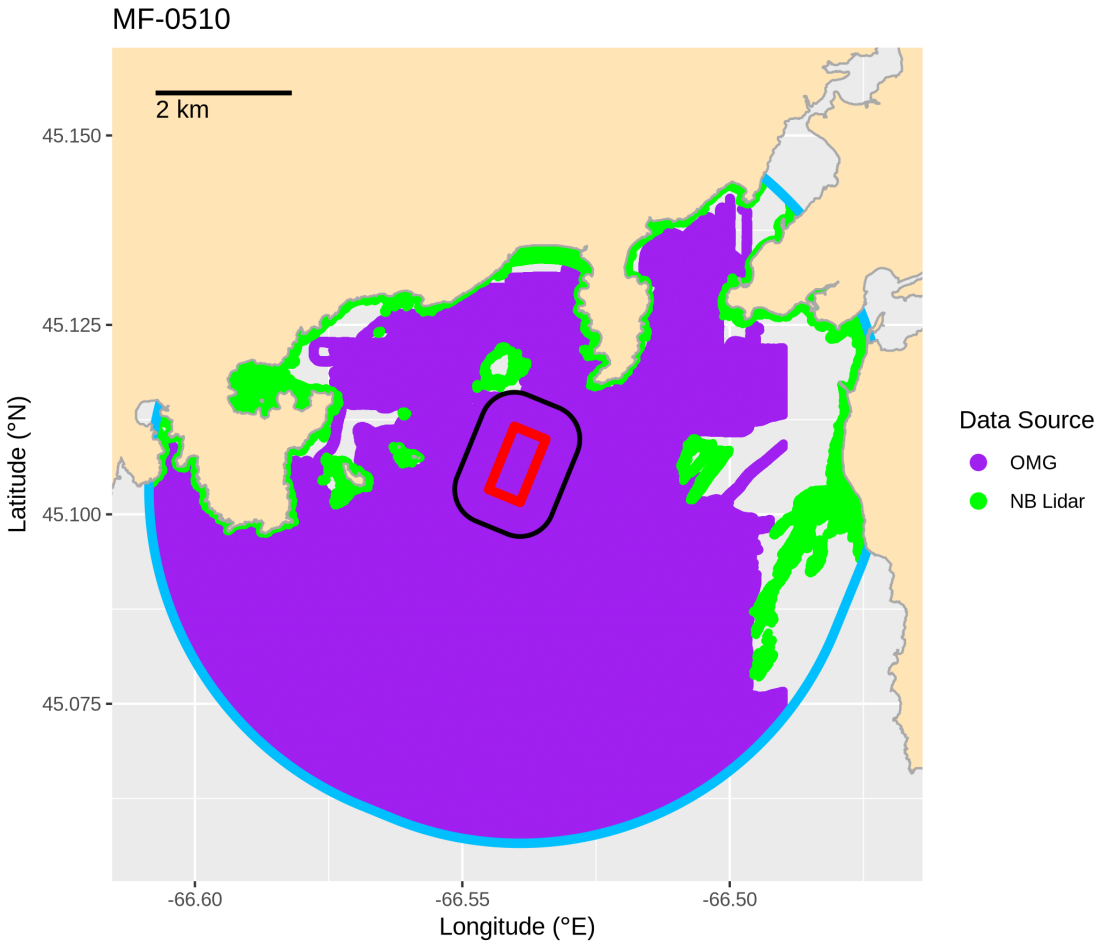


Figure 6.95.1. Farm MF-0510 bathymetry data source. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone. The distribution of Lidar data overlaps the OMG data which in turn overlays the CHS data; this emphases the coverage of the Lidar and OMG data and underrepresents the coverage of the CHS data.

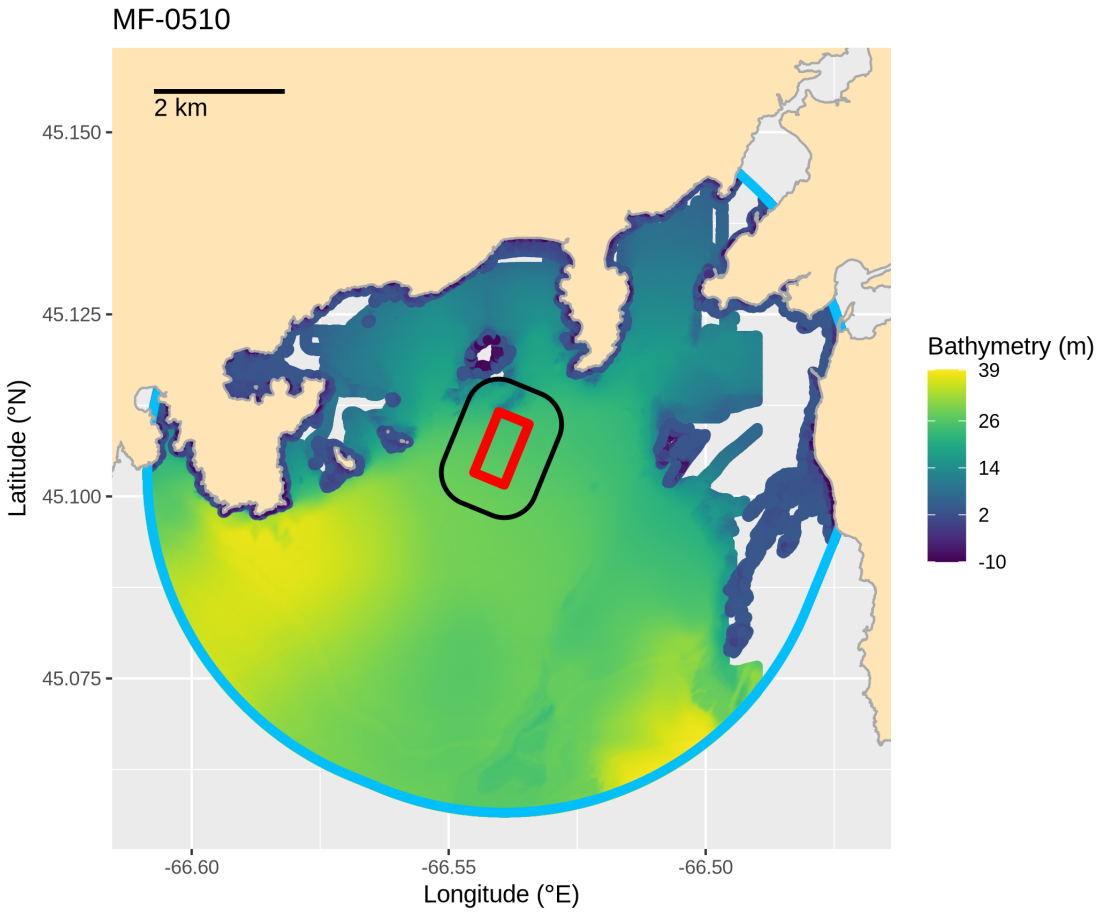


Figure 6.95.2. Farm MF-0510 bathymetry. The red polygon indicates the lease boundary. The black line delineates the 500 m buffer zone. The blue line delineates the 5 km buffer zone.