



**CETACEAN SIGHTINGS  
REPORT**

**JUNE 2023**

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## BACKGROUND

### Ocean Wise's Whales Initiative

Ocean Wise is a Canadian not-for-profit dedicated to restoring and protecting our oceans. With a focus on evidence-based solutions and everyday actions, we're empowering millions of people to turn the tide on climate change, overfishing and pollution. Built on more than 60 years of conservation, our successes are proof that amazing things are possible when we work together.

The Whales Initiative is a [conservation initiative within Ocean Wise](#), established in the mid 1980's. We conduct applied research on cetacean threats and threat mitigation, population and distribution trends, acoustic behavior, population genetics and photogrammetric monitoring of the health of at-risk cetacean populations. Our main goal is to develop and implement conservation tools which deliver critical information about whale and environmental health to decision makers in real time to protect and recover whale populations.

### Ocean Wise Sightings Network



*Transient killer whales observed from Saturna Island.  
Credit: Tyler Stolting.*

The Ocean Wise Sightings Network (OWSN; formerly British Columbia (BC) Cetacean Sightings Network - BCCSN) is one of Canada's most enduring and successful citizen science programs. For over 20 years, the OWSN has engaged in education and outreach throughout BC to encourage coastal citizens to become marine stewards by reporting their cetacean and sea turtle sightings in support of conservation-based research.

The OWSN manages an extensive, historic database on cetacean and sea turtle occurrence records, which to date contains over 200,000 verified sighting reports from approximately 7,300 observers. Ocean Wise provides subsets

of these data to over 10 conservation-based research projects annually. This database contains

a treasure trove of pertinent ecological information, including species assemblages, distribution, behavior, group composition and individual identities (for cetaceans).

### Cetacean Habitat Hotspots

Marine Protected Areas (MPAs) are designated areas where the marine environment holds a high level of environmental protection. In Canada, MPAs are governed by the *Oceans Act* (1996) and are administered by Fisheries and Oceans Canada (DFO). There are currently 14 *Oceans Act* MPAs across Canada, comprising over 350,000 km<sup>2</sup> - roughly 6% of Canada's marine and coastal areas. In the Pacific Ocean (Figure 1), MPAs include the Endeavour Hydrothermal Vents, Hecate Strait and Queen Charlotte Sound Glass Sponge Reefs, and SGaan Kinghlas-Bowie Seamount.

In addition to MPAs, Canada has other effective area-based conservation measures (OECMs), such as marine refuges (Figure 1), which provide conservation benefits for species, habitats and ecosystems. The main difference between MPAs and OECMs is the primary purpose of the area. The primary objective of a MPA is conservation, whereas OECMs are managed for another purpose while also achieving conservation and biodiversity outcomes. Currently, 13.86% (789,548 km<sup>2</sup>) of Canada's oceans and coastal areas are protected by MPAs and OECMs.



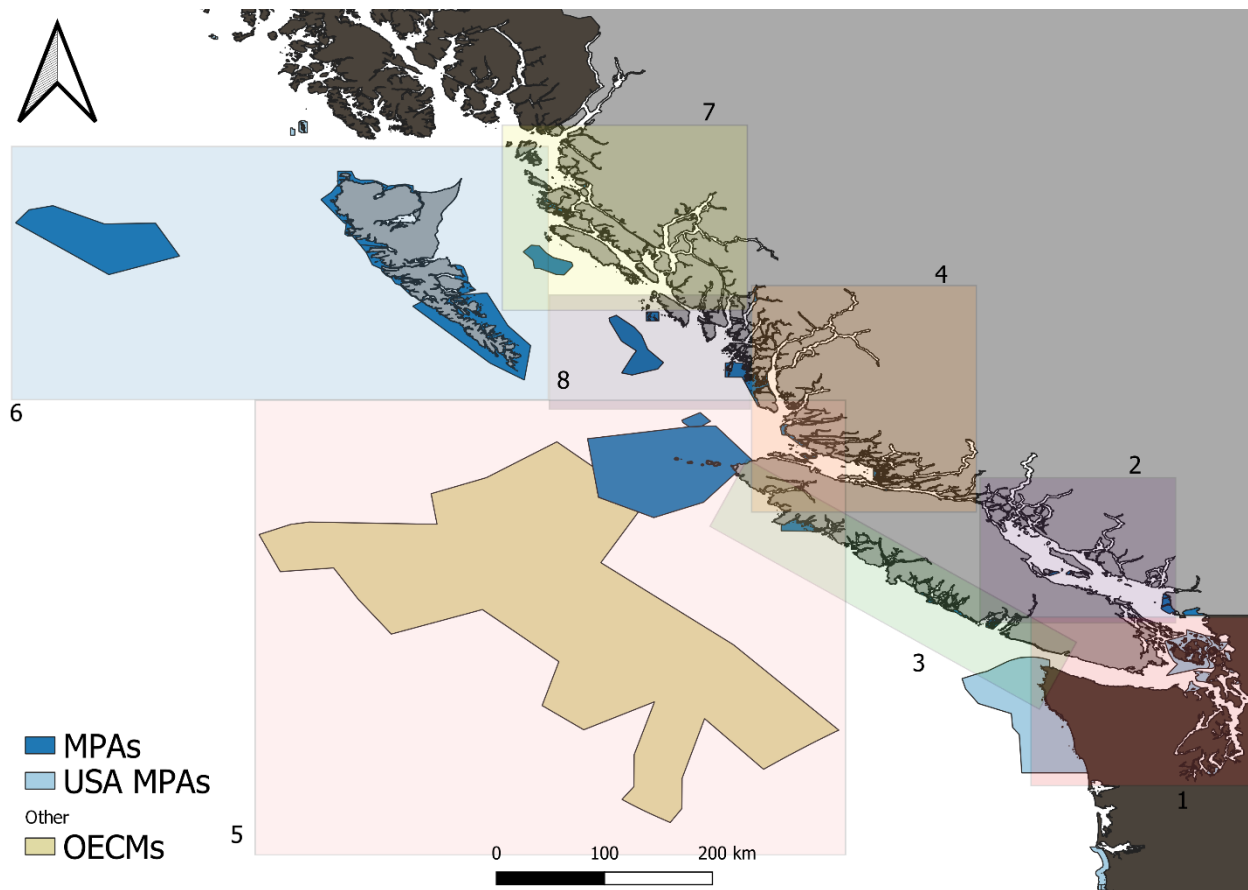
**Figure 1.** Conserved areas in Canada. Source: Environment and Climate Change Canada (2018) – Canadian Protected and Conserved Areas Database. Note: Data are current as of December 31, 2018. See interactive map [here](#).

Spatially and temporally, the OWSN data covers all 203 of the current Marine Protected Areas (MPAs) in the Canadian Pacific Ocean, and throughout the majority of the 127 MPAs in Washington State, with dates spanning from the 1950s to present day. Data continues to be added to this

database via Ocean Wise’s [WhaleReport app](#), which directly informs the [WhaleReport Alert System \(WRAS\)](#) to inform large ships such as ferries, tankers, and freighters of cetacean presence and reduce the risk of ship strikes and disturbance. This amalgamation of sighting reports is an important means of identifying and protecting critical habitat, highlighting areas of high risk, reducing anthropogenic threats to at-risk species, and ultimately contributing to the designation of new MPAs.

## PACIFIC NORTHWEST SIGHTINGS REGIONS

The OWSN receives sightings from across the BC coast, Washington State (USA) and southern Alaska. For this report, to showcase the sightings received across this vast area, we have divided the spatial extent of sightings into eight regions in relation to MPAs and OECCMs (Figure 2). More information about the organizations and sighting networks operating out of these regions can be found in Table A1 in the Appendix.



**Figure 2.** Map of the British Columbia (BC) coast and bordering Washington State (USA) and Alaskan waters split into eight regions.



*Dall's porpoise seen from Saturna Island. Credit: Maya Boffenberger.*

## REGION 1:

### Summary

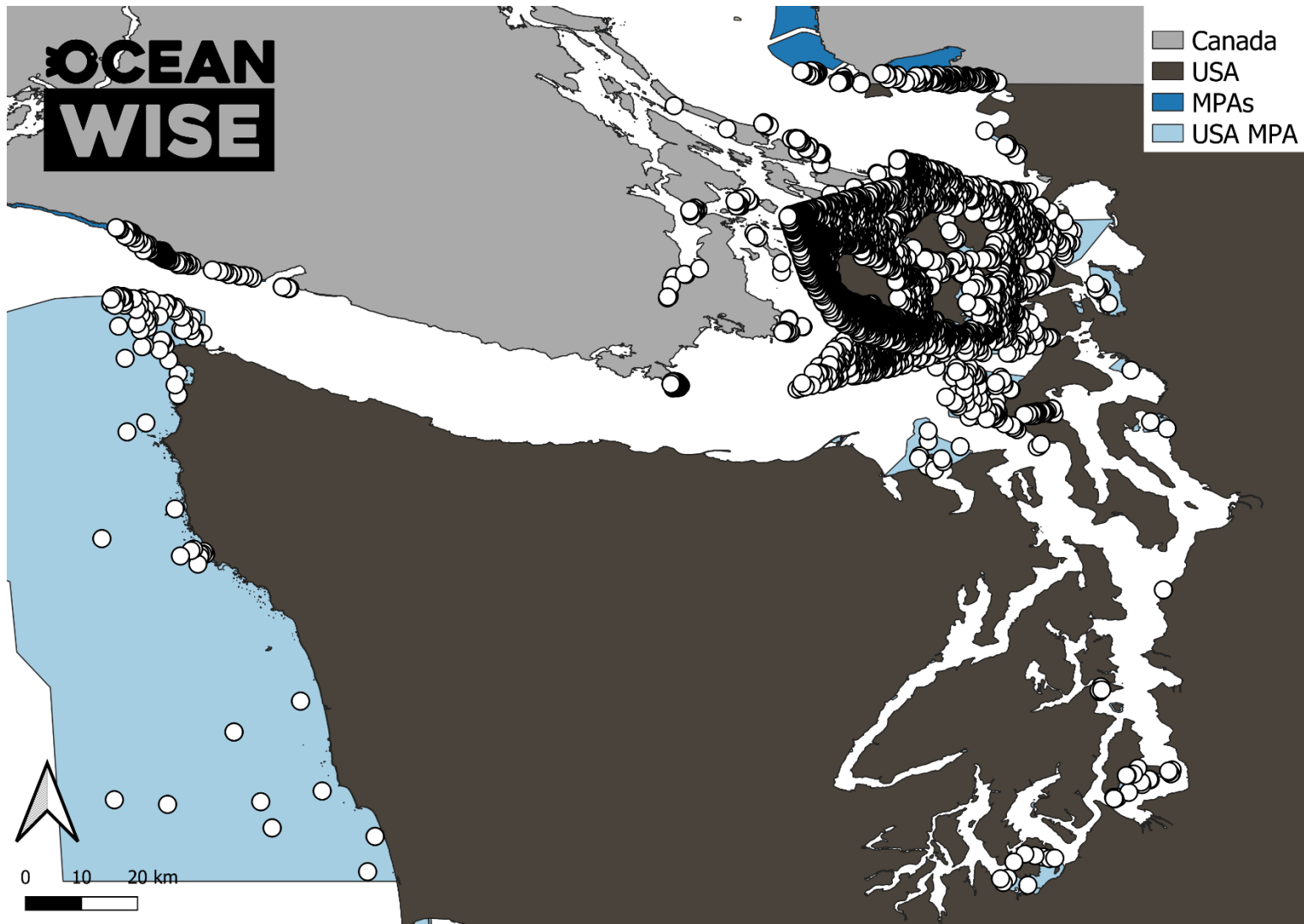
Within region 1, there is a total of 35,253 cetacean sightings with a confidence of 'Probable' or 'Certain' within the OWSN database. 14,345 of these sightings are reported in US waters, the remaining 20,908 sightings are from Canadian waters. For region 1, the top three species reported are killer whale (19,725 sightings), humpback whale (7,845 sightings), and harbour porpoise (3,518 sightings).

### Historic Sightings Within Protected Areas

There was a total of 16,339 sightings within Canadian and US MPAs (Figure 3). 784 of these sightings were in Canadian waters and 15,555 were in US waters.



*Humpback whale off the coast of Sooke. Credit: Jen Craigen.*



**Figure 3.** Cetacean sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) within Canadian and US waters in region 1. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.

**Table 1.** Identified cetacean species reported within region 1 Marine Protected Areas (MPAs) within Canadian and US waters 1992-2022.

<b>Species common name</b>	<b>Number of sightings</b>
Dall's porpoise	800
False killer whale	10
Fin whale	7
Grey whale	550
Harbour porpoise	1130
Humpback whale	1183
Hybrid porpoise	15
Killer whale	11941
Minke whale	679
Pacific white-sided dolphin	73
Risso's dolphin	2
Short-beaked common dolphin	1
Sperm whale	3

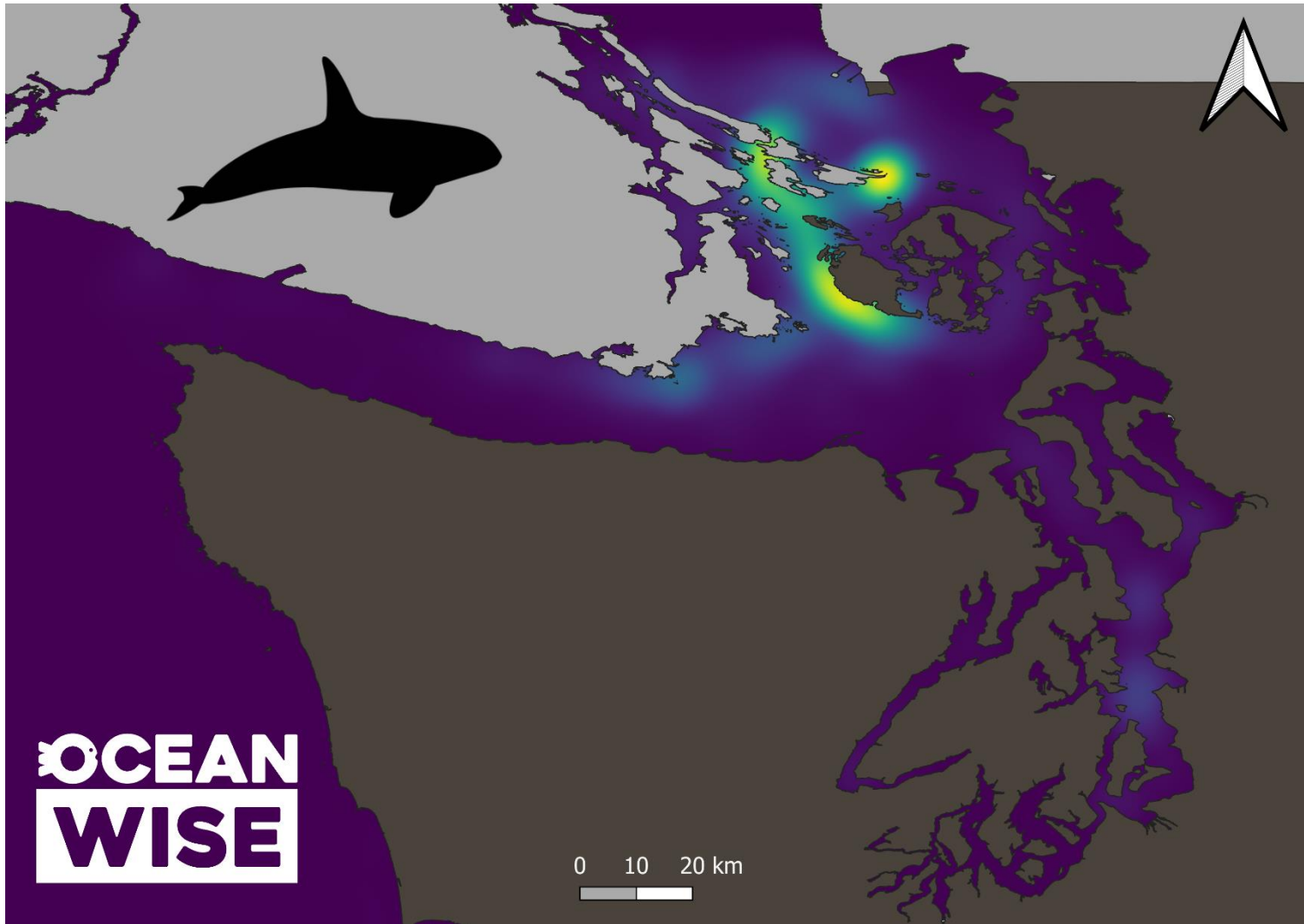
### **Top Reported Cetacean Species**

For killer whales, most sightings were submitted from the west of San Juan Island, Active Pass and East Point (Saturna Island; Figure 4). There were also a large portion of sightings submitted from Race Rocks and the south coast of Victoria.

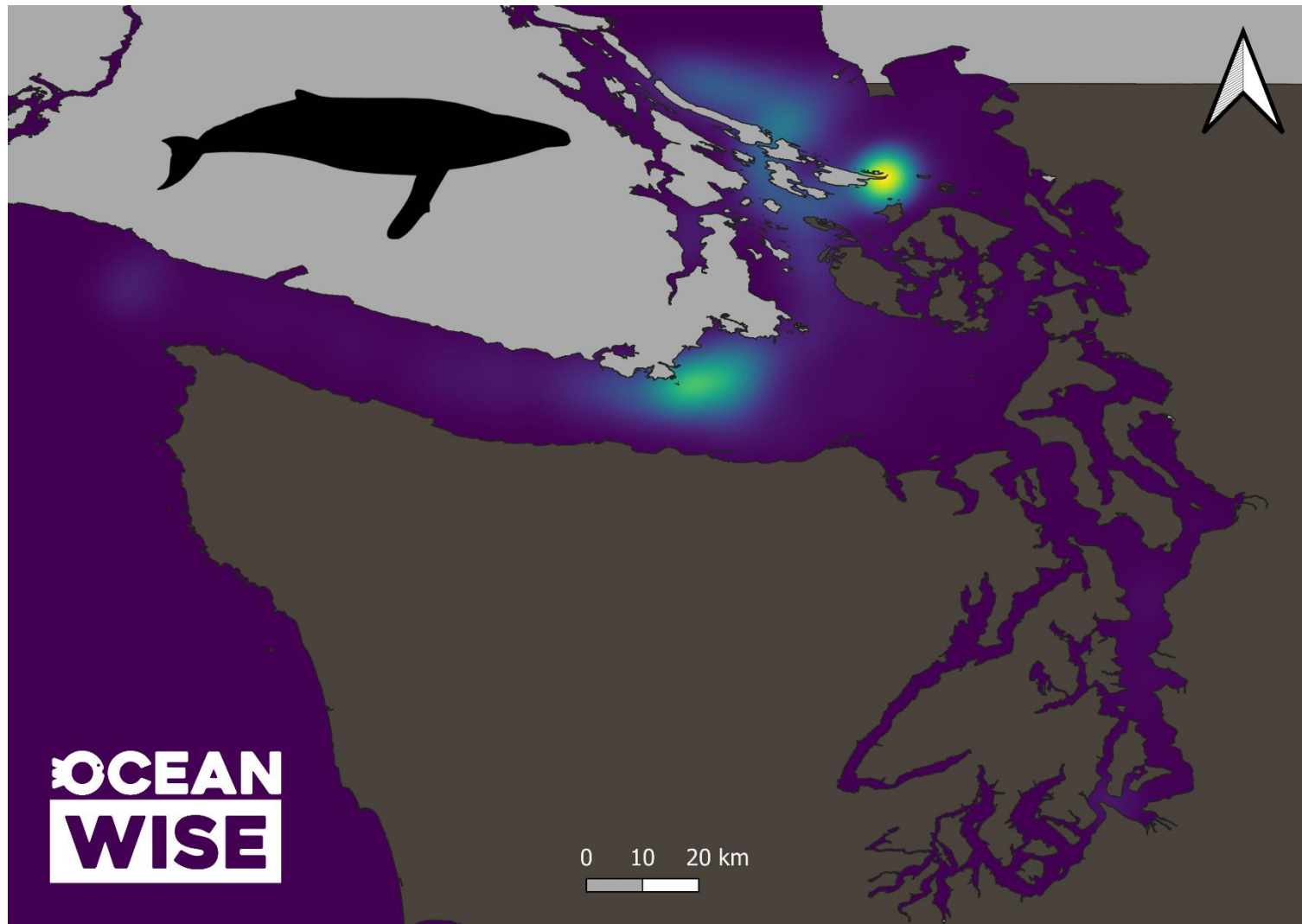
For Humpback whales, most sightings were submitted from East Point (Saturna Island) and surrounding Race Rocks (Figure 5). There was also a cluster of sightings within the Strait of Juan de Fuca and north of Active Pass.

For harbour porpoises, most sightings were submitted from East Point (Saturna Island) and south of Mayne Island (Figure 6). There was also a cluster of sightings south of Vancouver.

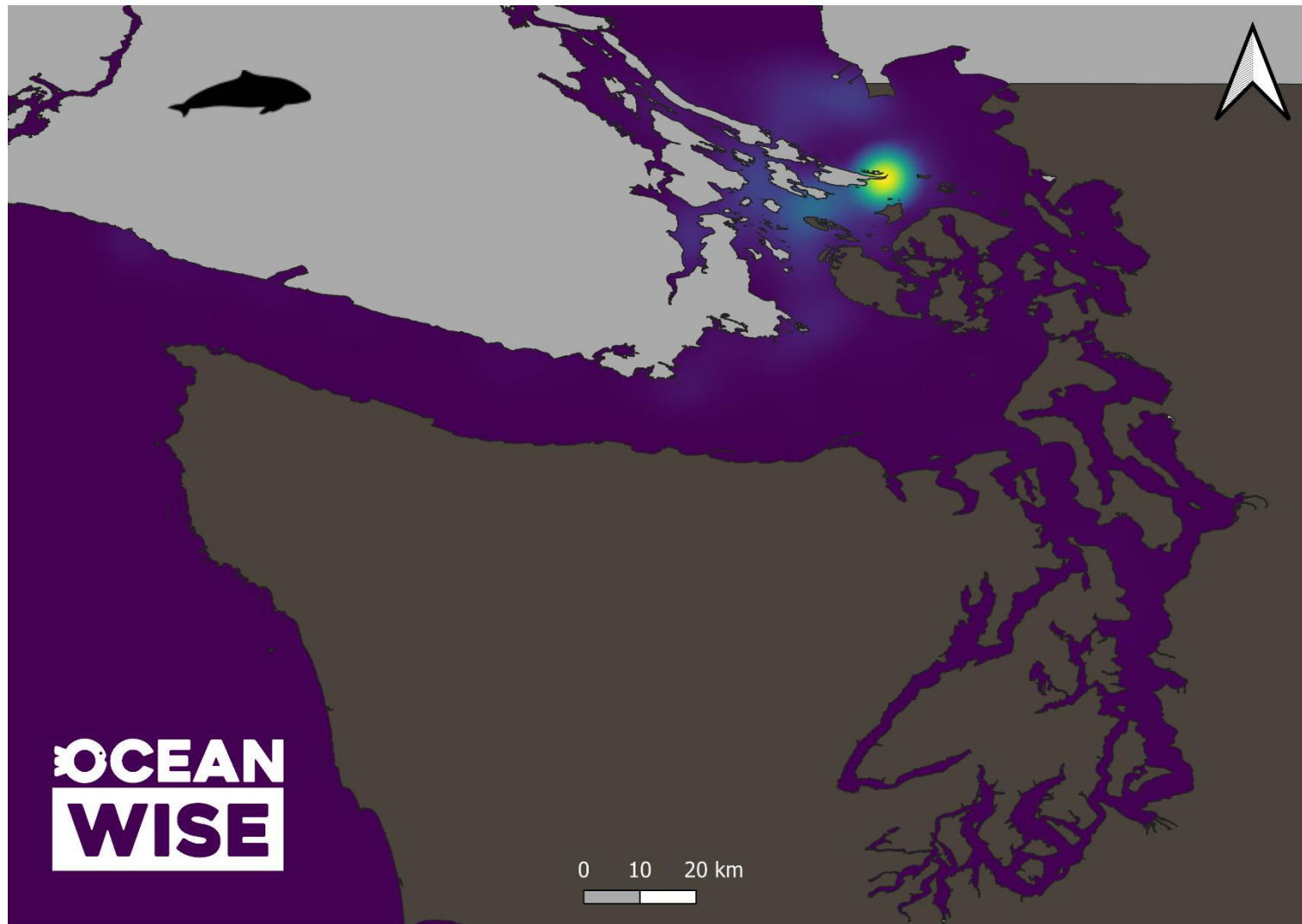




**Figure 4.** Heatmap of killer whale (all ecotype) sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 1. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 5.** Heatmap of humpback whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 1. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 6.** Heatmap of harbour porpoise sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 1. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.

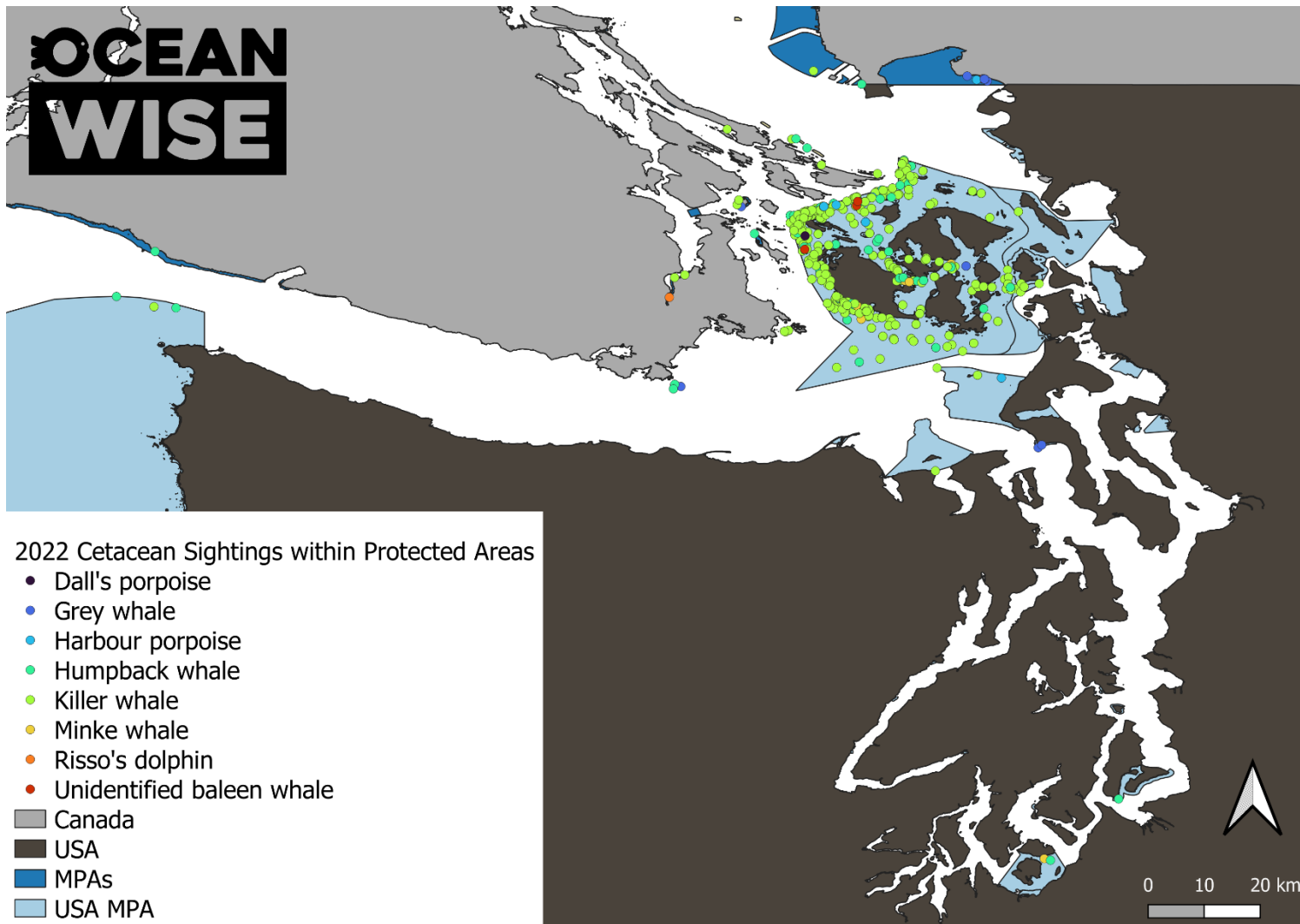
## 2022 Sightings Within Protected Areas

In 2022 alone, there were 717 reports of cetaceans within Canadian and US MPAs. Over two thirds of the sightings were of killer whales (557 sightings; Table 2; Figure 7).

**Table 2.** Identified cetacean species reported in 2022 alone within region 1 Marine Protected Areas (MPAs) within Canadian and US waters.

Species common name	Number of sightings
Dall's porpoise	4
False killer whale	11
Harbour porpoise	12
Humpback whale	114
Killer whale	557
Minke whale	11
Risso's dolphin	1





**Figure 7.** Cetacean sightings (by species) submitted to the Ocean Wise Sightings Network (OWSN) in 2022 within Marine Protected Areas (MPAs) in Canadian and US waters in region 1. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.



Humpback whale in the Strait of Georgia. Credit: Nick Delany.

## REGION 2:

### Summary

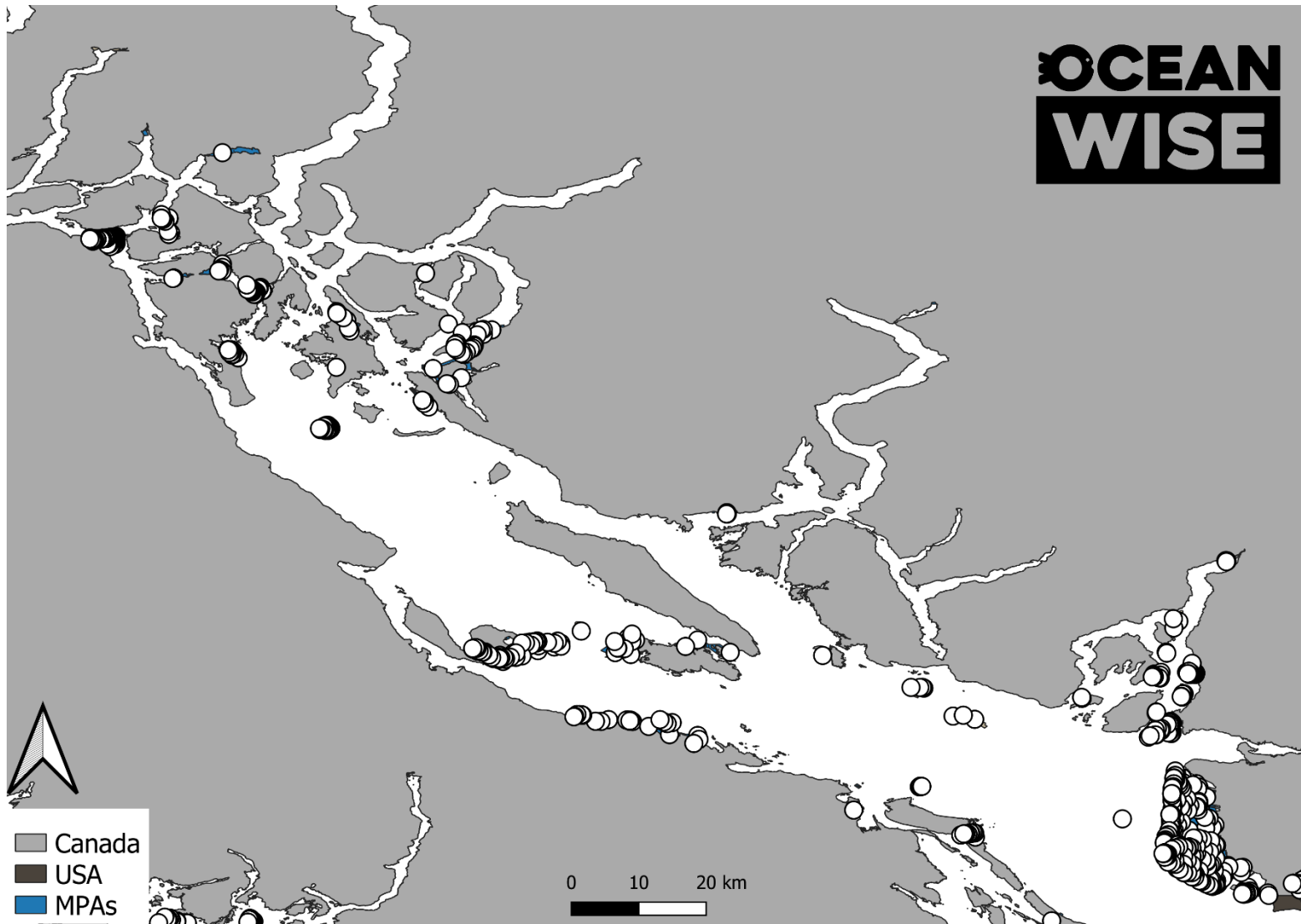
Within region 2, there is a total of 28,399 cetacean sightings with a confidence of 'Probable' or 'Certain' within the OWSN database. The top three reported species in this region are killer whale (10,452 sightings), humpback whale (10,088 sightings), and harbour porpoise (3,007 sightings).



Killer whales reported off Bowen Island. Credit: Di Izdebski.

### Historic Sightings Within Protected Areas

There was a total of 16,339 sightings within Canadian and US MPAs (Figure 8). 784 of these sightings were in Canadian waters and 15,555 were in US waters.



**Figure 8.** Cetacean sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 2. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.

**Table 3.** Identified cetacean species reported within region 2 Marine Protected Areas (MPAs) within Canadian waters 1988-2022.

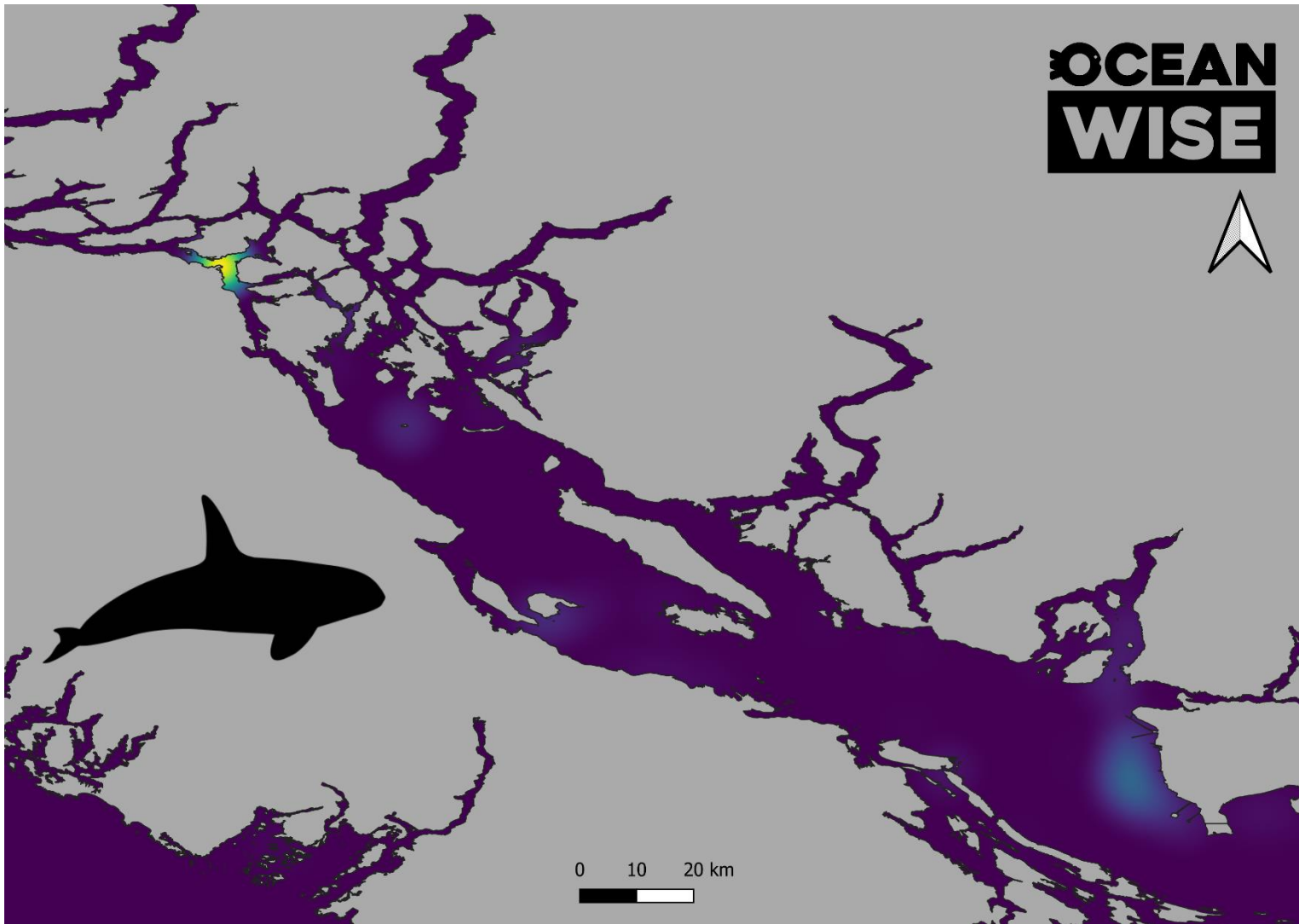
<b>Species common name</b>	<b>Number of sightings</b>
Blue whale	1
Dall's porpoise	1169
False killer whale	70
Fin whale	15
Grey whale	828
Harbour porpoise	3007
Humpback whale	10088
Hybrid porpoise	3
Killer whale	10452
Minke whale	120
Northern right whale dolphin	1
Pacific white-sided dolphin	2450
Risso's dolphin	10
Sperm whale	3

### **Top Reported Cetacean Species**

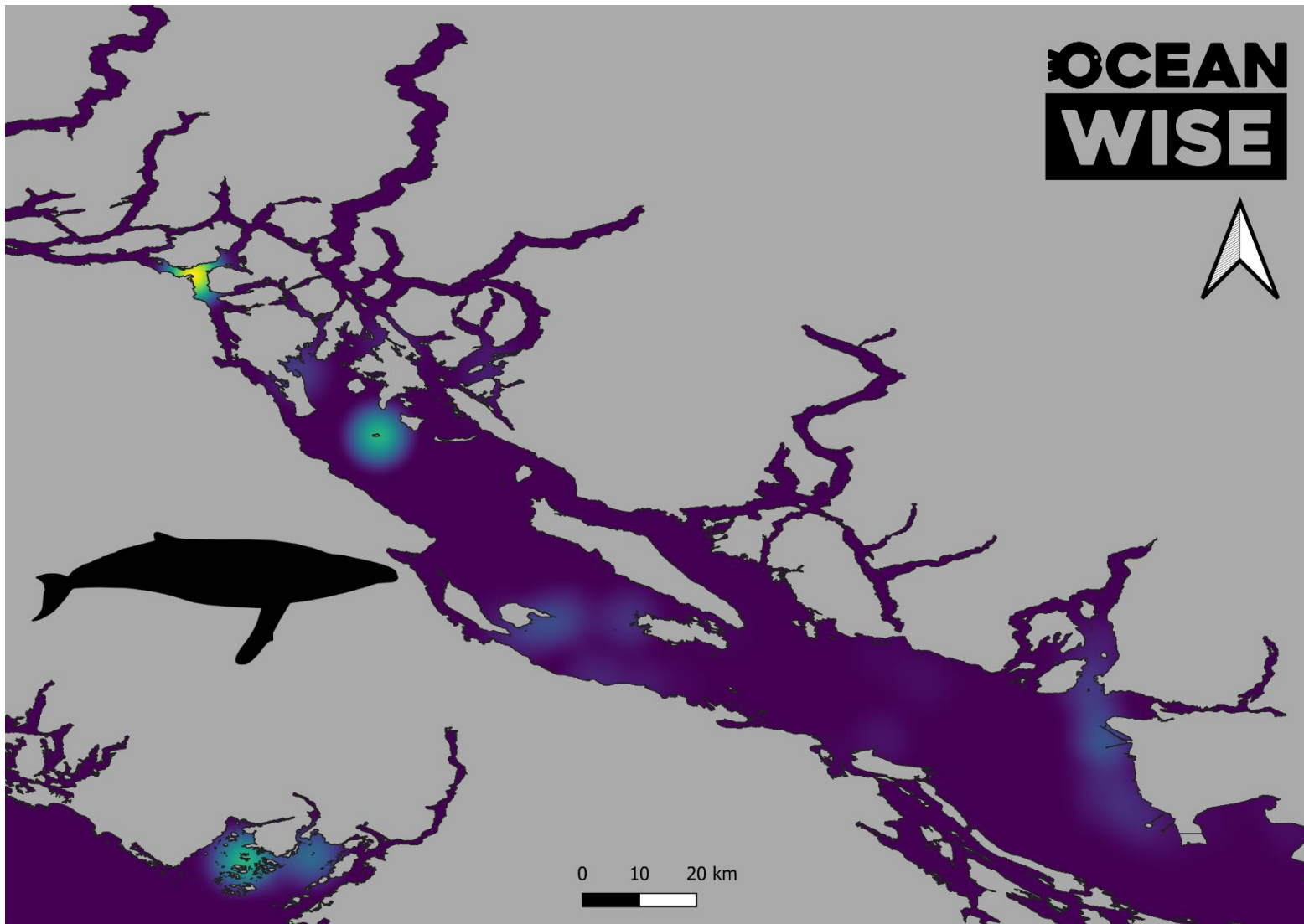
For killer whales, most sightings were submitted from Rock Bay, between East Thurlow and Sonora Island (Figure 9). There was also a cluster of sightings submitted from the Port of Vancouver and Mitlenatch Island area.

Similar to killer whales, most humpback whale sightings were submitted from Rock Bay, between East Thurlow and Sonora Island (Figure 10). There were also a large portion of sightings submitted from Mitlenatch Island and Broken Group islands on the West Coast of Vancouver Island.

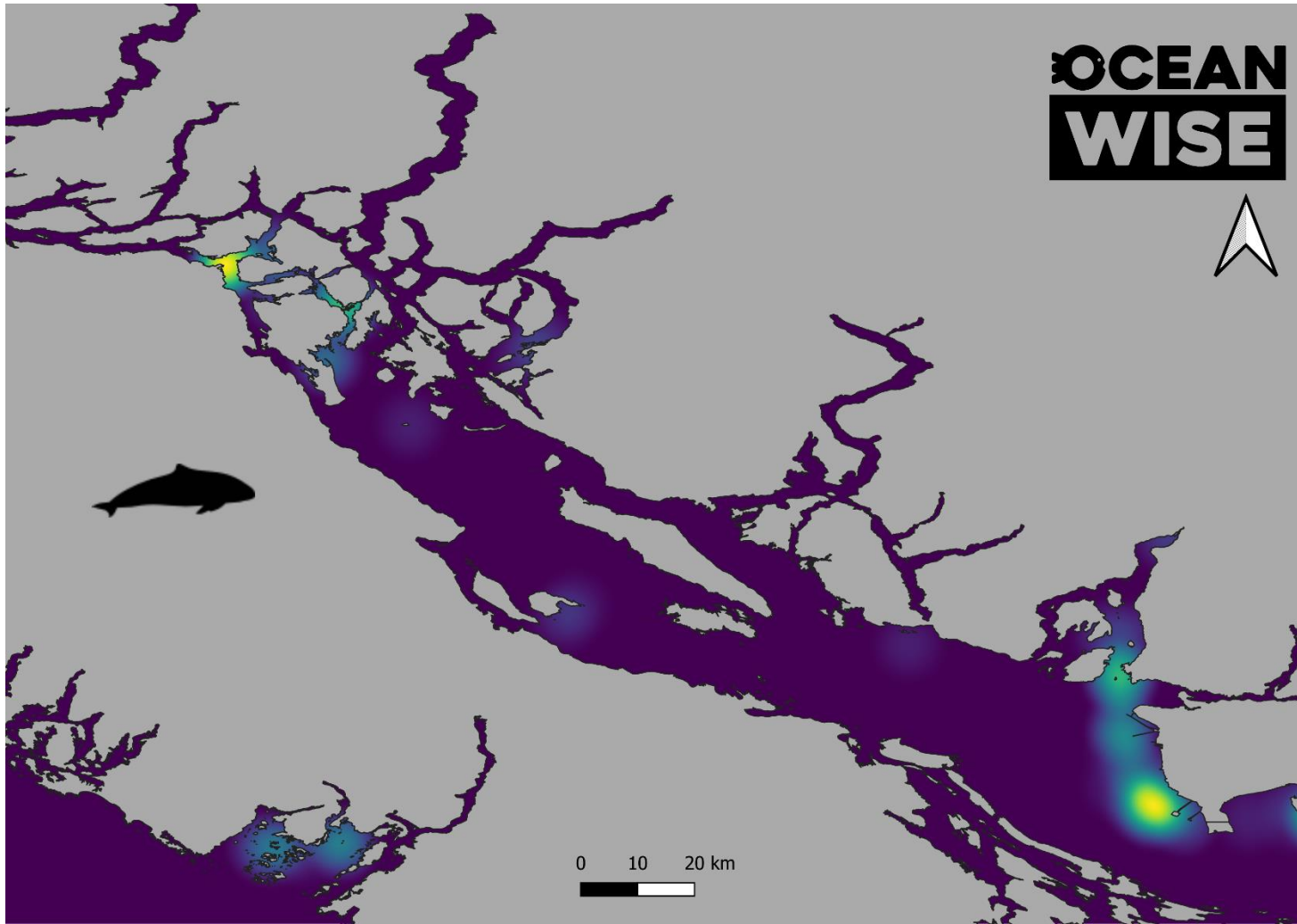
For harbour porpoises, most sightings were submitted from Rock Bay, between East Thurlow and Sonora Island, and the Port of Vancouver area (Figure 11). There was also a cluster of sightings submitted from around Passage Island and Broken Group islands on the West Coast of Vancouver Island.



**Figure 9.** Heatmap of killer whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 2. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 10.** Heatmap of humpback whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 2. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 11.** Heatmap of harbour porpoise sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 2. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.

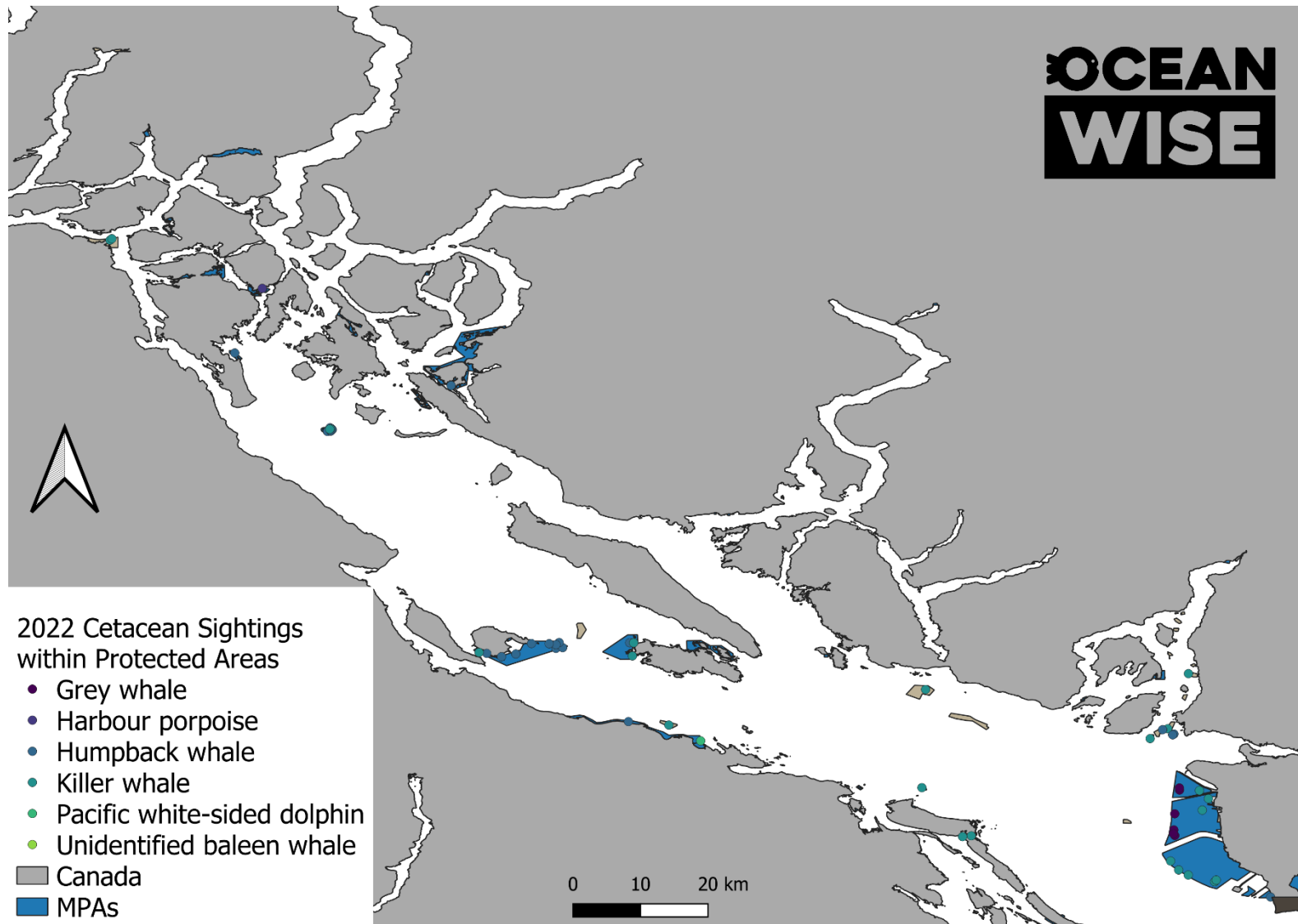
## 2022 Sightings Within Protected Areas

In 2022 alone, there were 71 reports of cetaceans within Canadian MPAs/OECMs. Over two thirds of the sightings were of killer whales (26 sightings) and humpback whales (29 sightings; Table 4; Figure 12).

**Table 4.** Identified cetacean species reported in 2022 alone within Marine Protected Areas (MPAs) and Other Effective Area-Based Conservation Measures (OECMs) in region 2.

Species common name	Number of sightings
Grey whale	11
Harbour porpoise	3
Humpback whale	29
Killer whale	26
Pacific white-sided dolphin	1





**Figure 12.** Cetacean sightings (by species) submitted to the Ocean Wise Sightings Network (OWSN) in 2022 within Canadian and US Marine Protected Areas (MPAs) in region 2. Note: All sightings have a confidence rating of ‘Probable’ or ‘Certain’, data is opportunistic and not corrected for effort.



Fin Whale off Long Beach (BC). Credit: Mark Sawyer.

## REGION 3:

### Summary

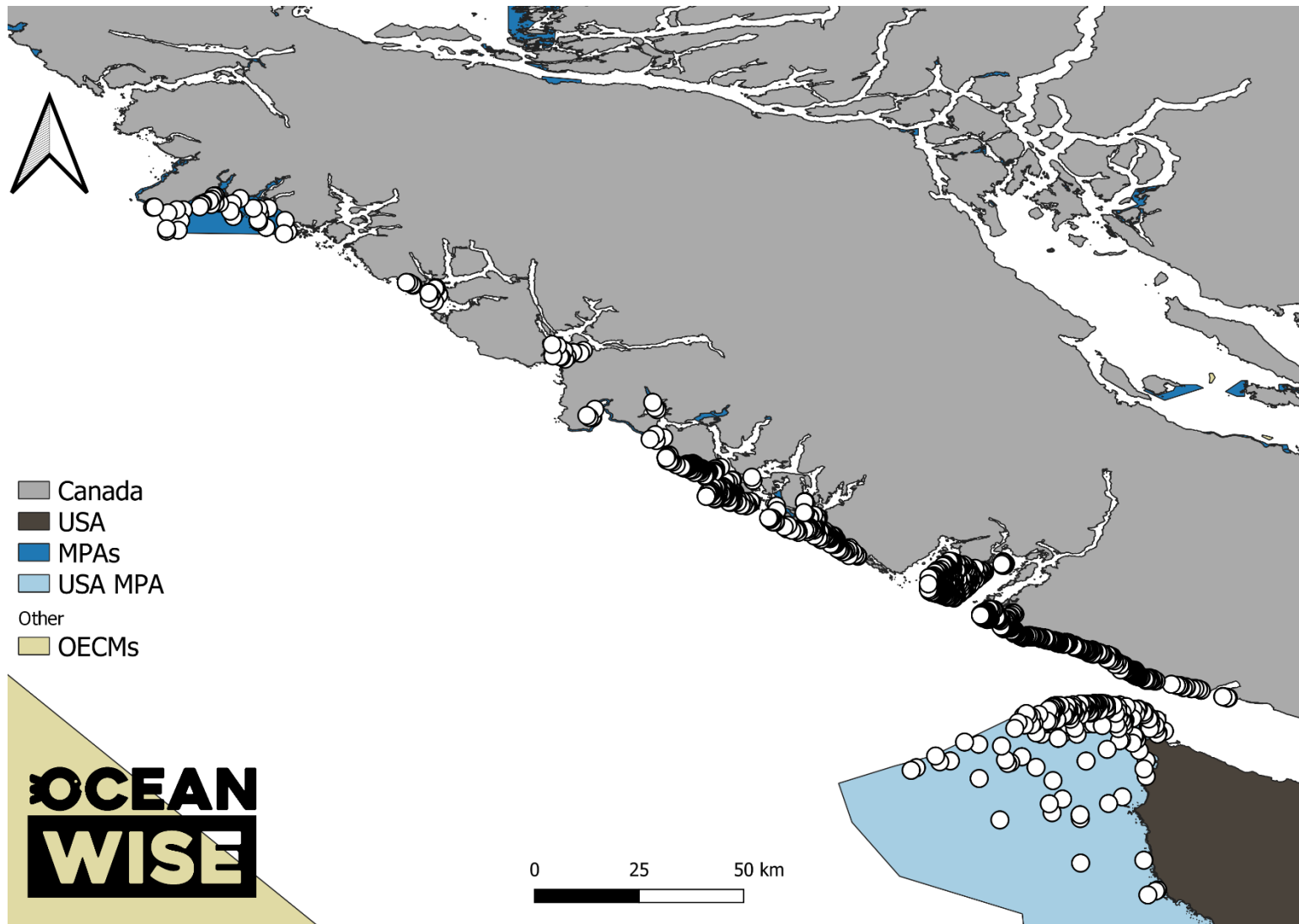
Within region 3, there is a total of 9,594 cetacean sightings with a confidence of 'Probable' or 'Certain' within the OWSN database. The top three reported species in this region are humpback whale (4,254 sightings), grey whale (2,479 sightings), and harbour porpoise (1,152 sightings).



Grey whale off Tofino. Credit: Mark Sawyer.

### Historic Sightings Within Protected Areas

There was a total of 2,429 sightings within Canadian and US MPAs (Figure 13). 2,214 of these sightings were in Canadian waters and 215 were in US waters.



**Figure 13.** Cetacean sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 3. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.

**Table 5.** Identified cetacean species reported within region 3 Marine Protected Areas (MPAs) in Canadian waters 1988-2022.

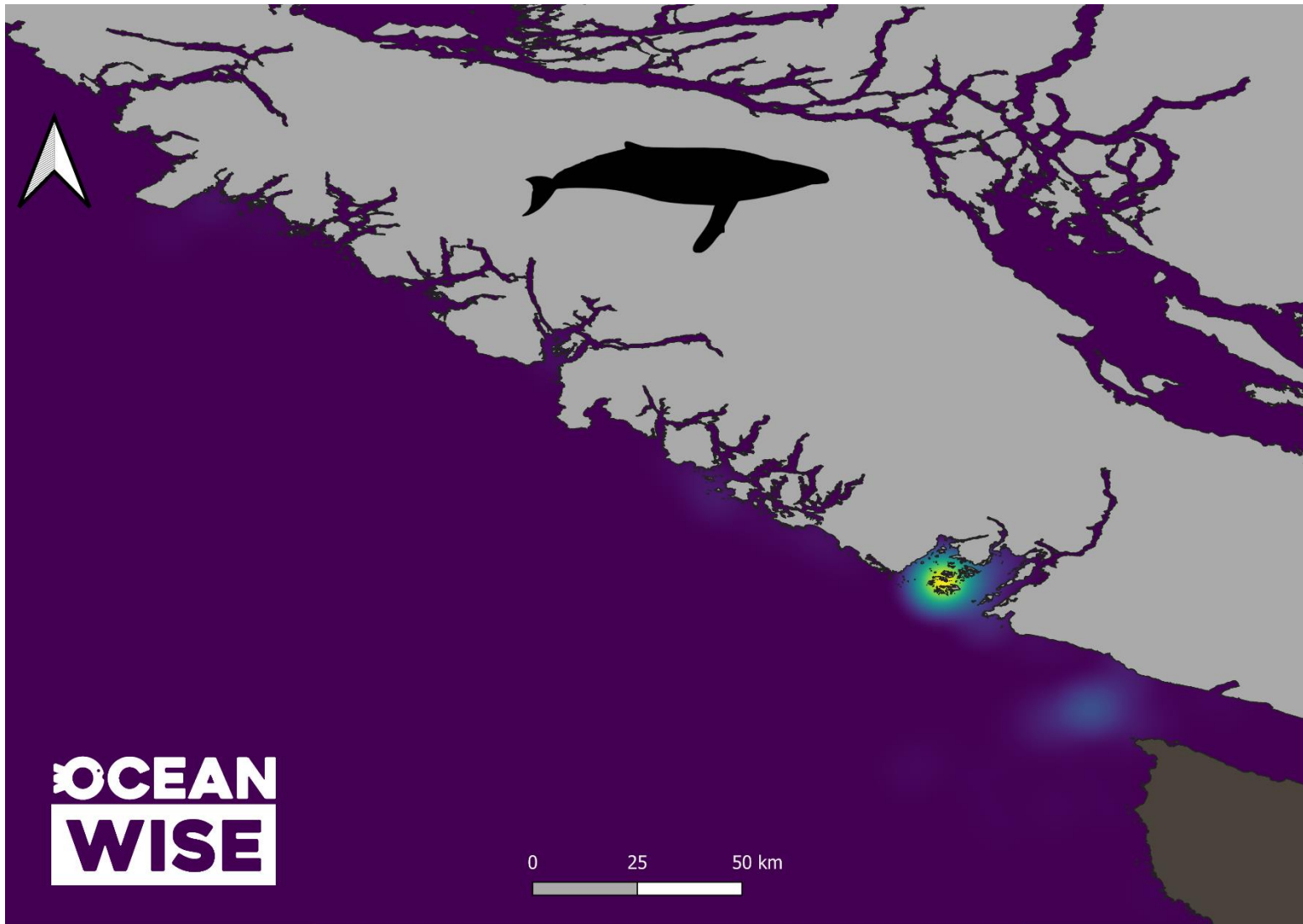
<b>Species common name</b>	<b>Number of sightings</b>
Dall's porpoise	45
Grey whale	1205
Harbour porpoise	416
Humpback whale	537
Hybrid porpoise	1
Killer whale	155
Minke whale	10
Pacific white-sided dolphin	4
Risso's dolphin	2
Sperm whale	3

### **Top Reported Cetacean Species**

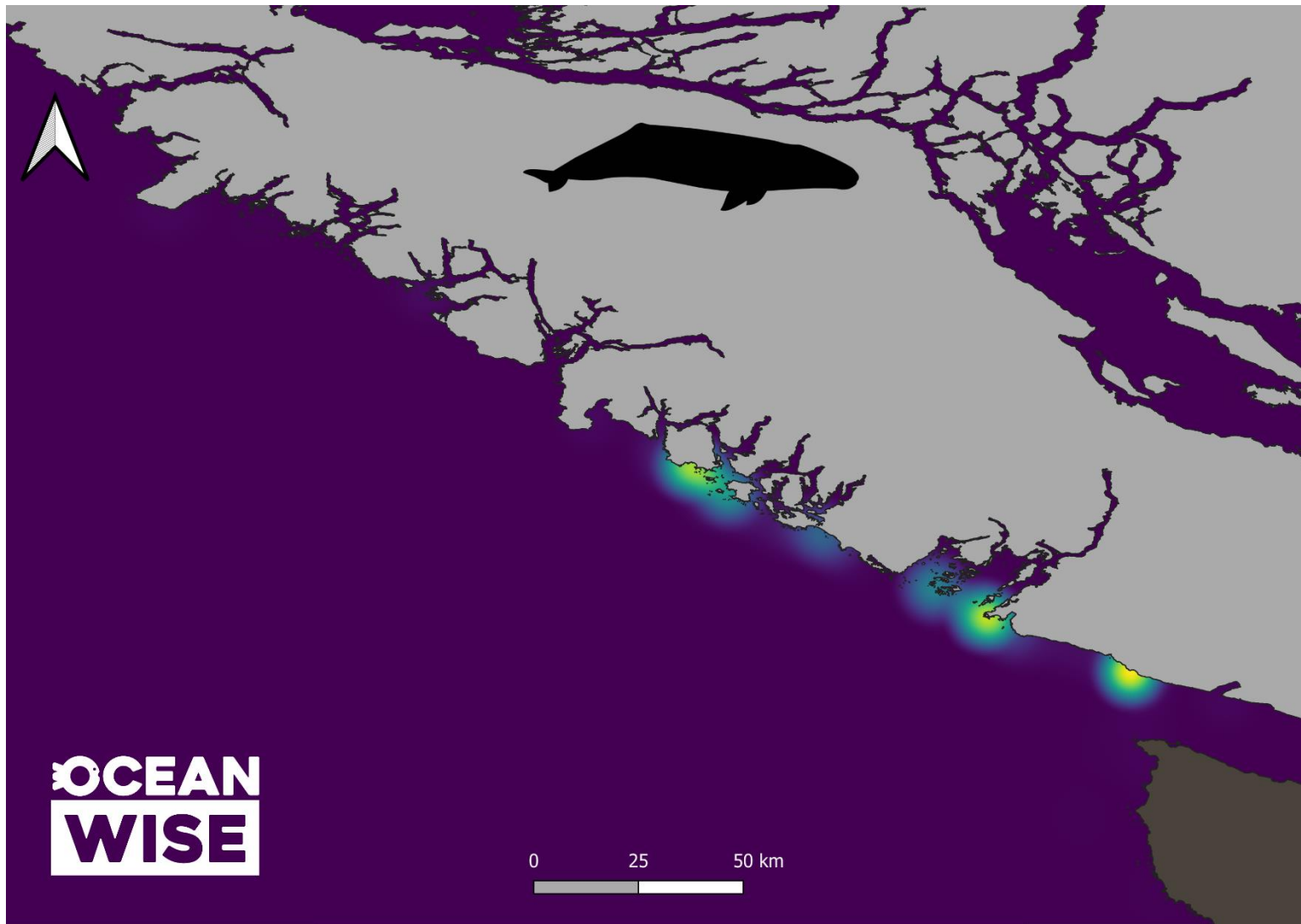
For humpback whales, most sightings were submitted from the Broken Group Islands (Figure 14). There was also a cluster of sightings submitted from the western extent of the Strait of Juan de Fuca.

For grey whale sightings, most were submitted from the western extent of the Strait of Juan de Fuca, the coast of the Pacific Rim National Park Reserve of Canada, and Clayoquot Sound (Figure 15). There were also a large portion of sightings submitted from Long Beach.

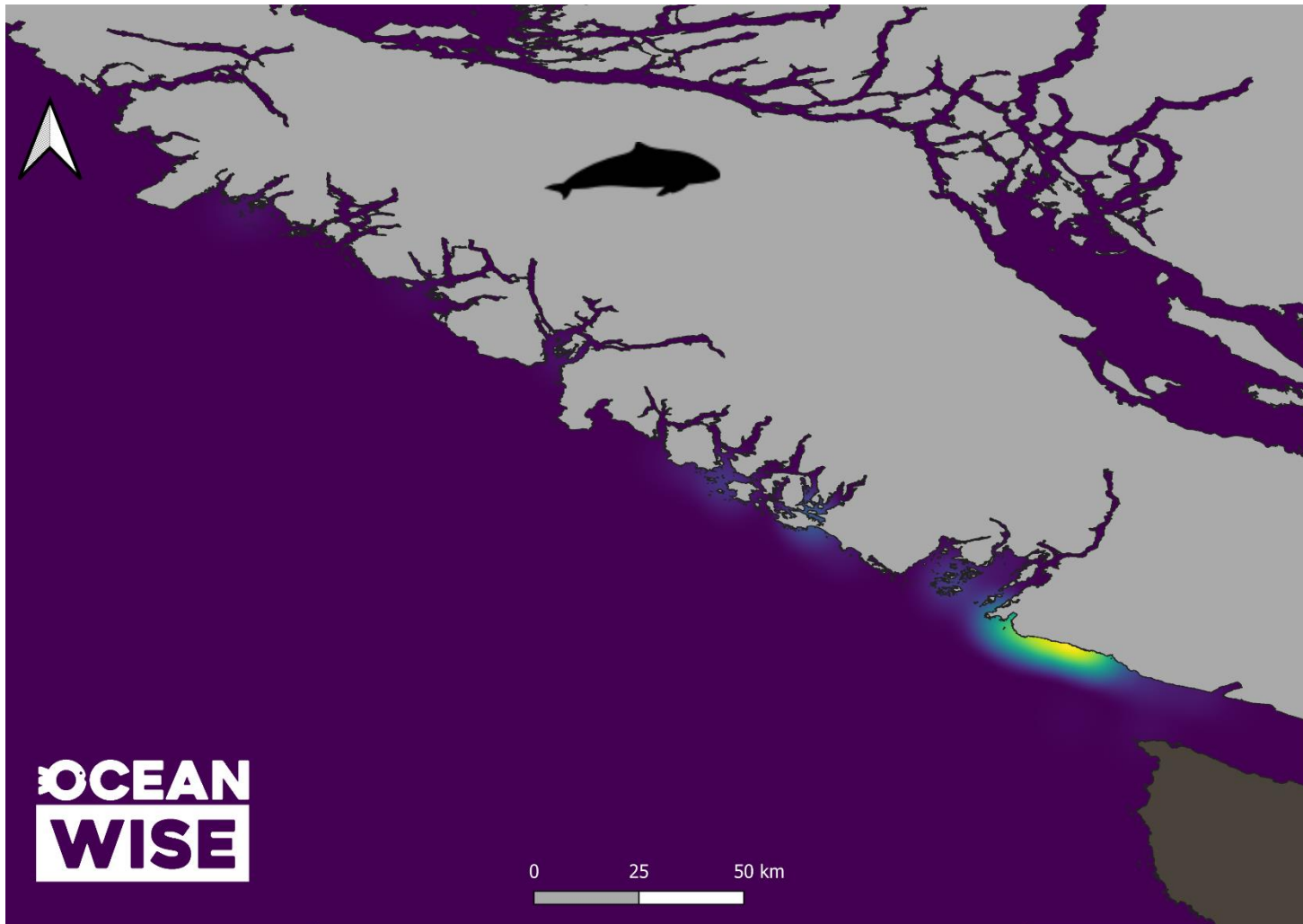
For harbour porpoises, most sightings were submitted from the coast of the Pacific Rim National Park Reserve of Canada (Figure 16). There was also a cluster of sightings submitted from around Clayoquot Sound.



**Figure 14.** Heatmap of humpback whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 3. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 15.** Heatmap of grey whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 3. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 16.** Heatmap of harbour porpoise sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 3. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.

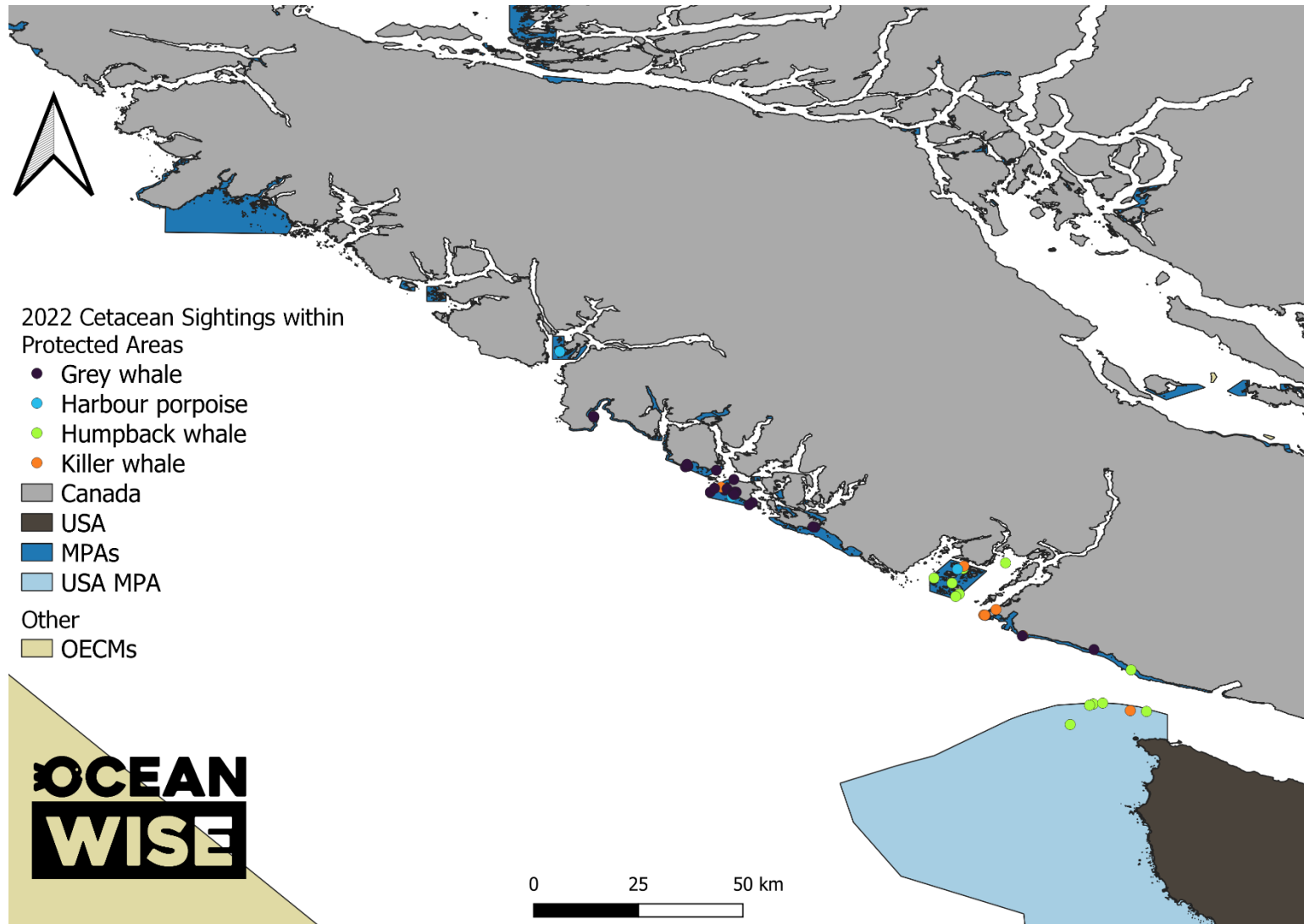
## 2022 Sightings Within Protected Areas

In 2022, there were 58 reports of cetaceans within MPAs. Over half of the sightings were of grey whales (36 sightings; Table 6; Figure 17).

**Table 6.** Identified cetacean species reported in 2022 alone within Marine Protected Areas (MPAs) in region 3.

Species common name	Number of sightings
Grey whale	36
Harbour porpoise	3
Humpback whale	12
Killer whale	7





**Figure 17.** Cetacean sightings (by species) submitted to the Ocean Wise Sightings Network (OWSN) in 2022 within Canadian Marine Protected Areas (MPAs) in region 3. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.



## REGION 4:

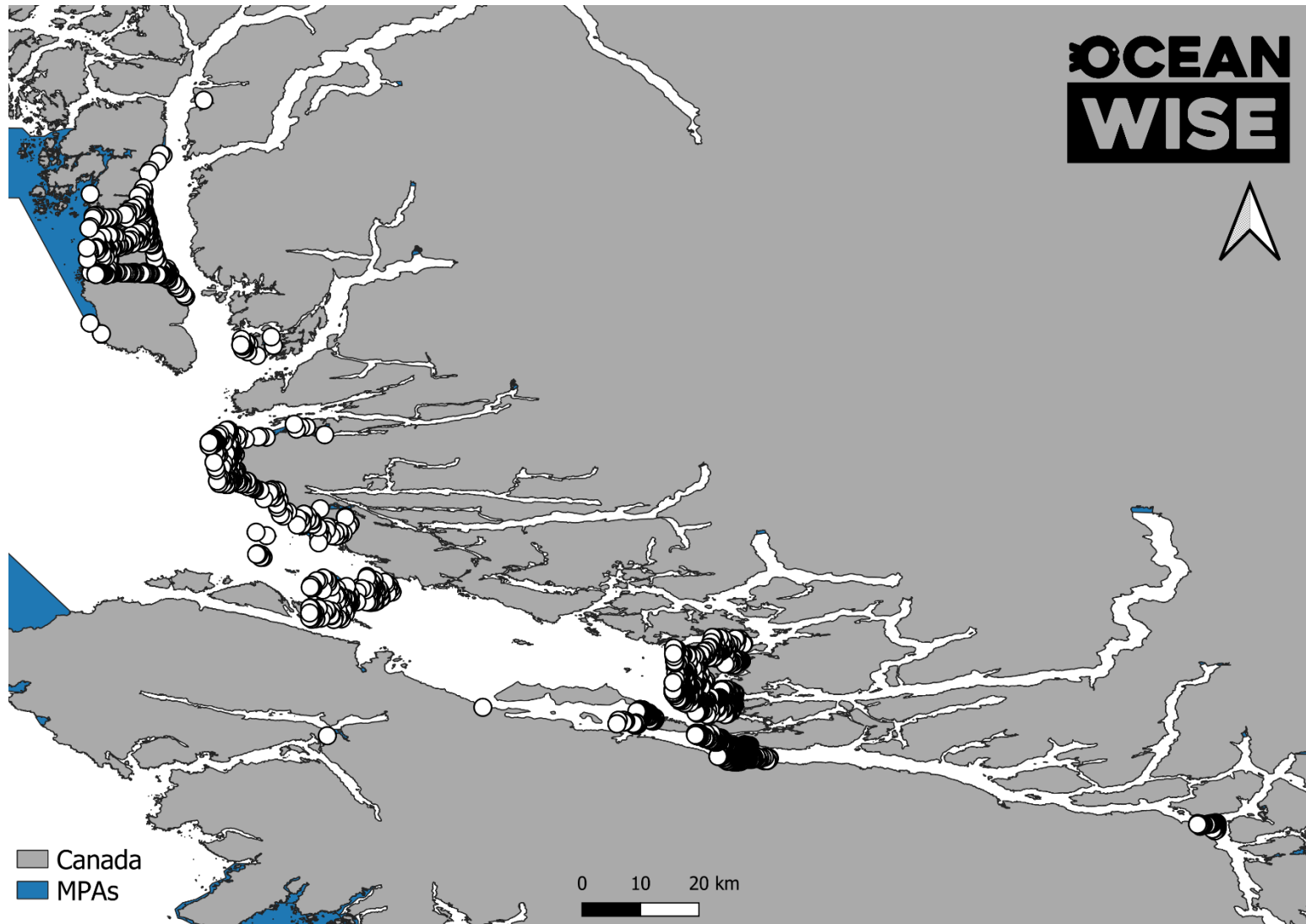
### Summary

Within region 4, there is a total of 29,208 cetacean sightings with a confidence of 'Probable' or 'Certain' within the OWSN database. The top three reported species in this region are humpback whale (8,895 sightings), killer whale (7,030 sightings), and Dall's porpoise (5,286 sightings).



### Historic Sightings Within Protected Areas

There was a total of 3,985 sightings within Canadian MPAs (Figure 18).



**Figure 18.** Cetacean sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 4. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.

**Table 7.** Identified cetacean species reported within region 4 Marine Protected Areas (MPAs) in Canadian waters 1988-2022.

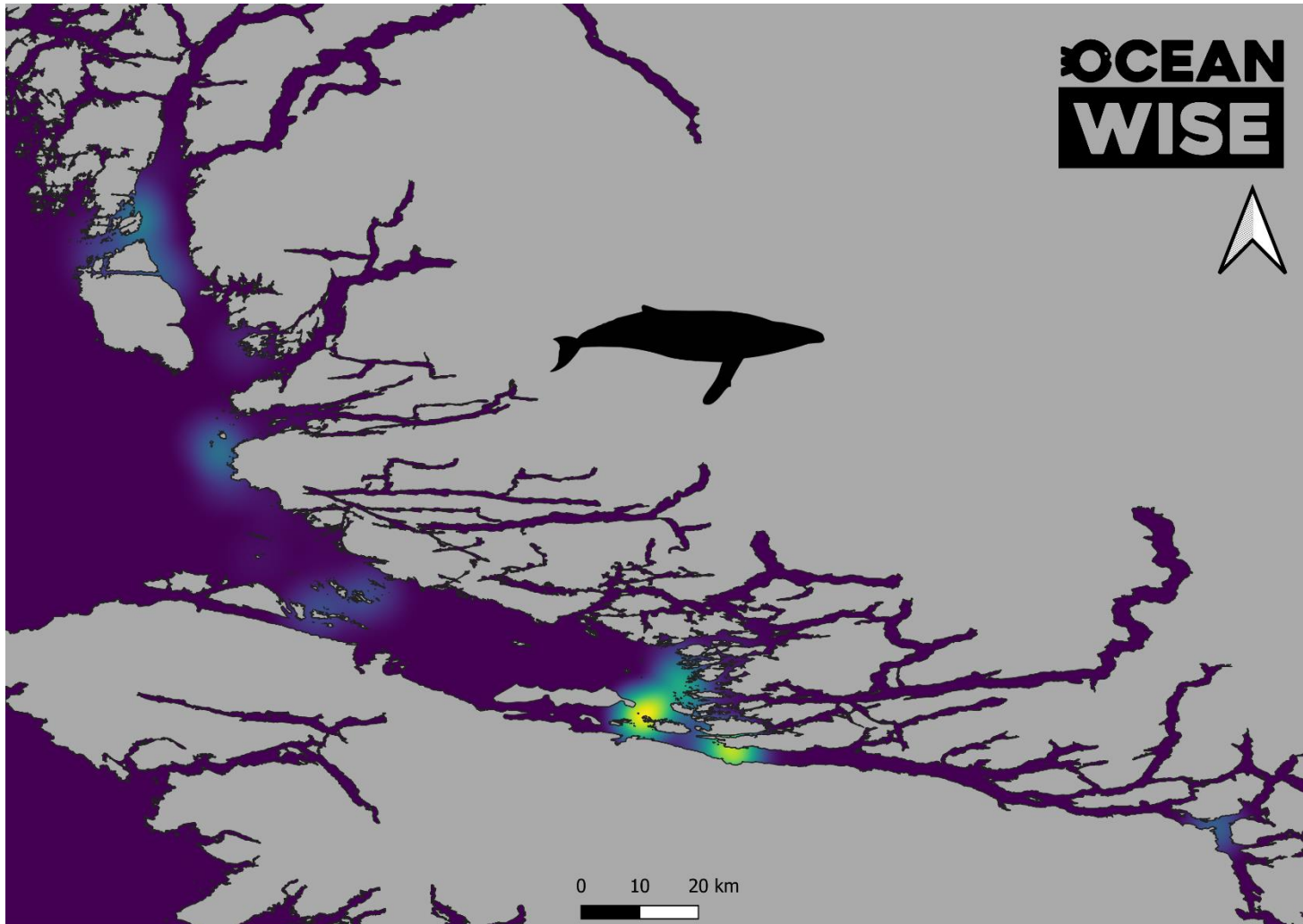
<b>Species common name</b>	<b>Number of sightings</b>
Dall's porpoise	992
False killer whale	1
Grey whale	94
Harbour porpoise	408
Humpback whale	1026
Hybrid porpoise	1
Killer whale	948
Minke whale	131
Pacific white-sided dolphin	379
Sperm whale	1

### **Top Reported Cetacean Species**

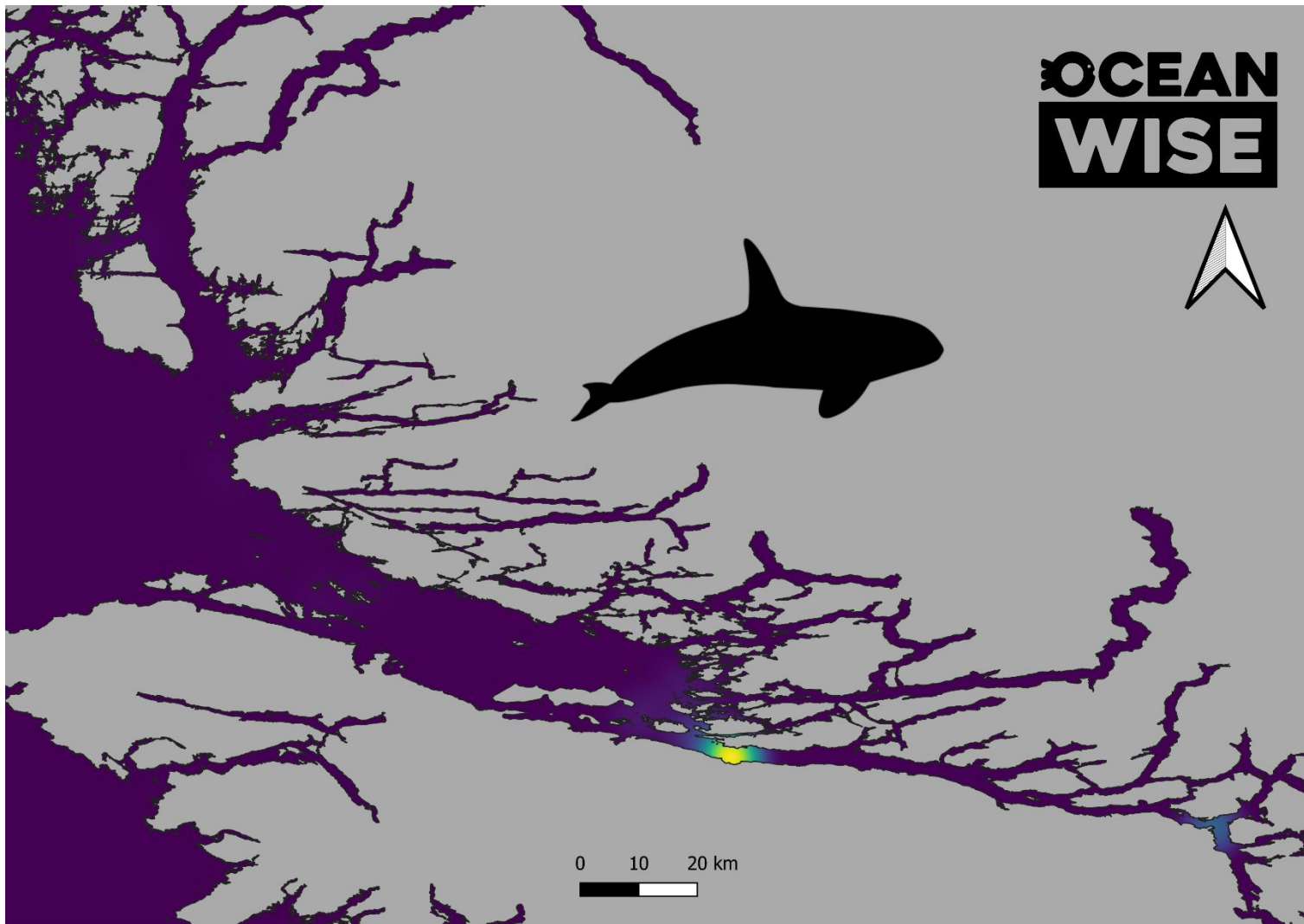
For humpback whales, most sightings were submitted from Blackfish Sound and Robson Bight Ecological Reserve (Figure 19). There was also a cluster of sightings submitted from Fitz Hugh Sound and Alexandra Passage.

Most killer whale sightings were submitted from Robson Bight Ecological Reserve (Figure 20). There were also a large portion of sightings submitted from Rock Bay, between East Thurlow and Sonora Island

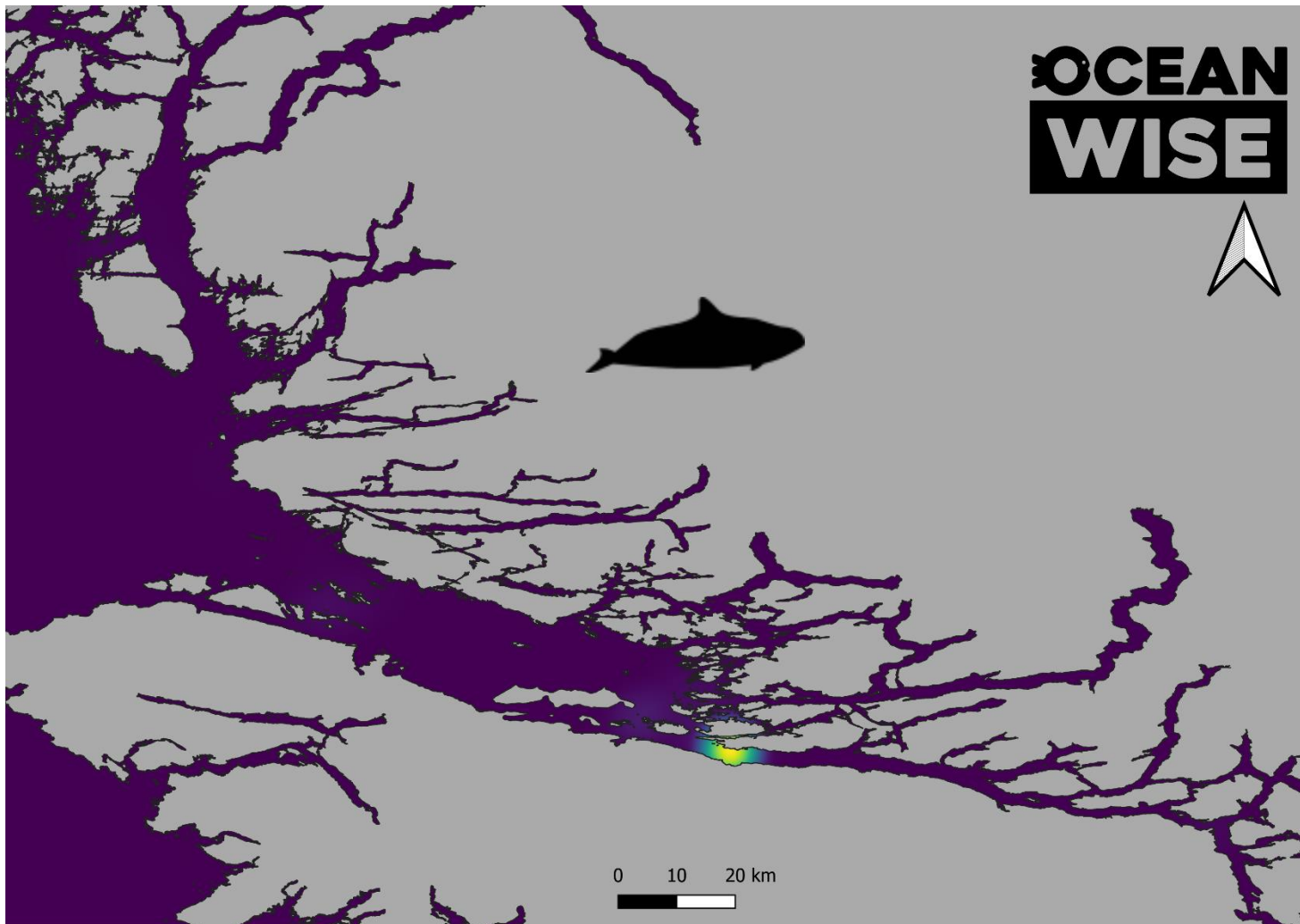
For Dall's porpoises, most sightings were submitted from Robson Bight Ecological Reserve (Figure 21).



**Figure 19.** Heatmap of humpback whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 4. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 20.** Heatmap of killer whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 4. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 21.** Heatmap of Dall's porpoise sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 4. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.

## 2022 Sightings Within Protected Areas

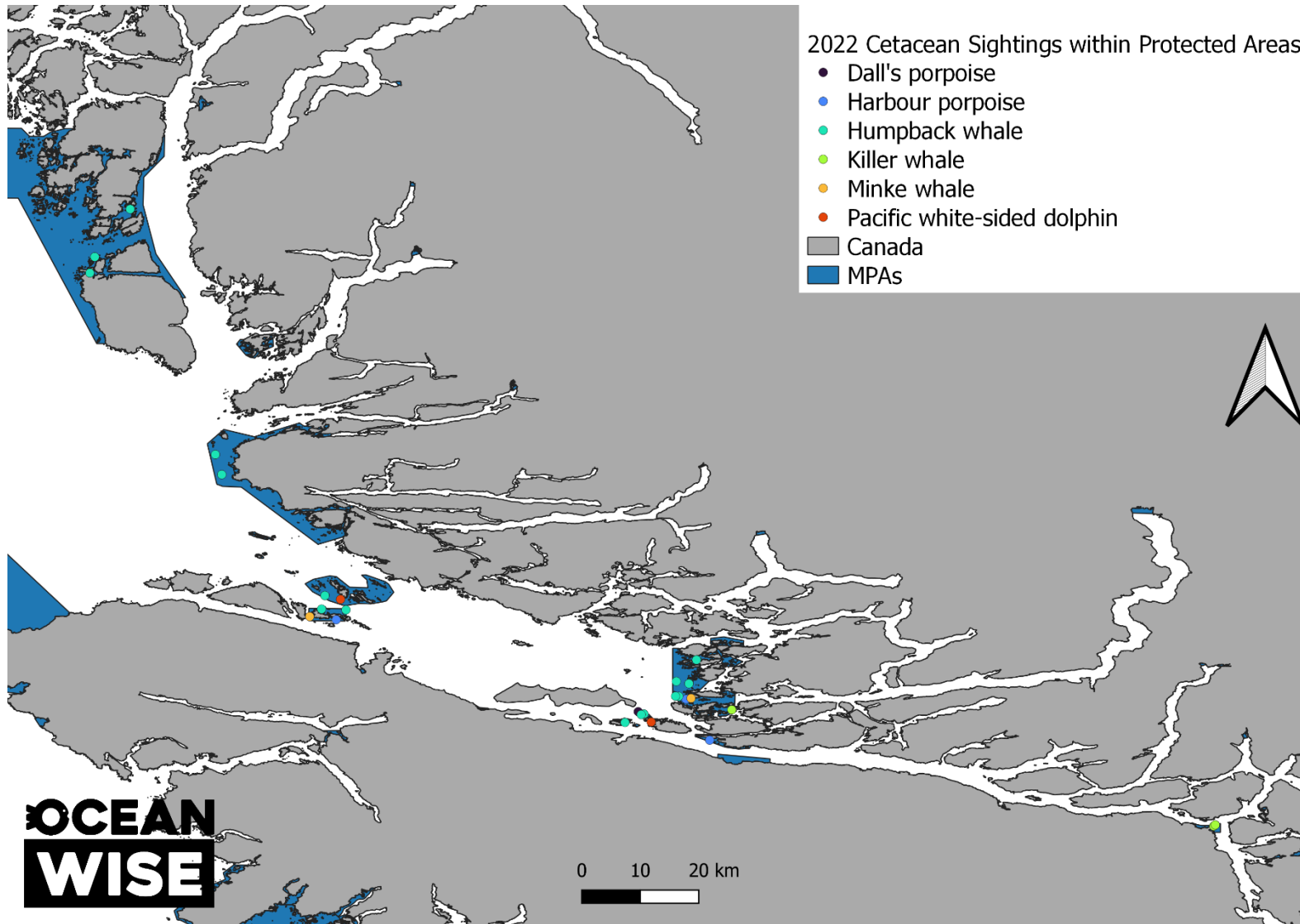
In 2022, there were 31 reports of cetaceans within MPAs. Over half of the sightings were of humpback whales (19 sightings; Table 8; Figure 22).

**Table 8.** Identified cetacean species reported in 2022 alone within Marine Protected Areas (MPAs) and Other Effective Area-Based Conservation Measures (OECMs) in region 4.

Species common name	Number of sightings
Dall's porpoise	2
Harbour porpoise	3
Humpback whale	19
Killer whale	3
Minke whale	2
Pacific white-sided dolphin	2



*Northern resident killer whale A72 (Bend; back) with calf (front) in Blackfish Sound. Credit: Maria Harvey.*



**Figure 22.** Cetacean sightings (by species) submitted to the Ocean Wise Sightings Network (OWSN) in 2022 within Canadian Marine Protected Areas (MPAs) in region 4. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.



## REGION 5:

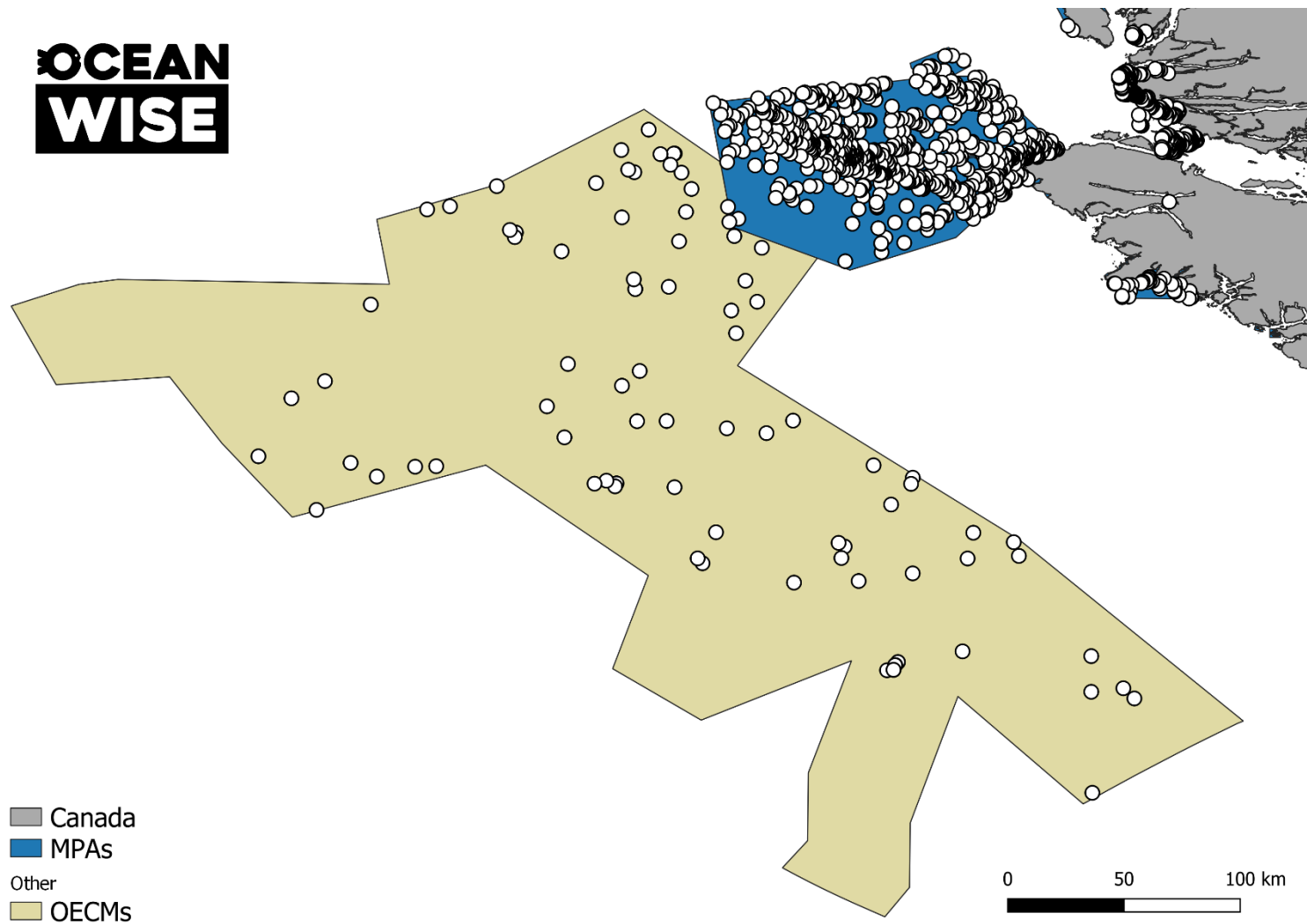
### Summary

Within region 5, there is a total of 6,358 cetacean sightings with a confidence of 'Probable' or 'Certain' within the OWSN database. The top three reported species in this region are humpback whale (2,867 sightings), killer whale (869 sightings), and Dall's porpoise (763 sightings).



### Historic Sightings Within Protected Areas

There was a total of 1,435 sightings within Canadian MPAs and OECMs (Figure 23).



**Figure 23.** Cetacean sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) and Other Effective Area-Based Conservation Measures (OECMs) within Canadian waters in region 5. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.

**Table 9.** Identified cetacean species reported within region 5 Marine Protected Areas (MPAs) and Other Effective Area-Based Conservation Measures (OECMs) within Canadian waters 1958-2022.

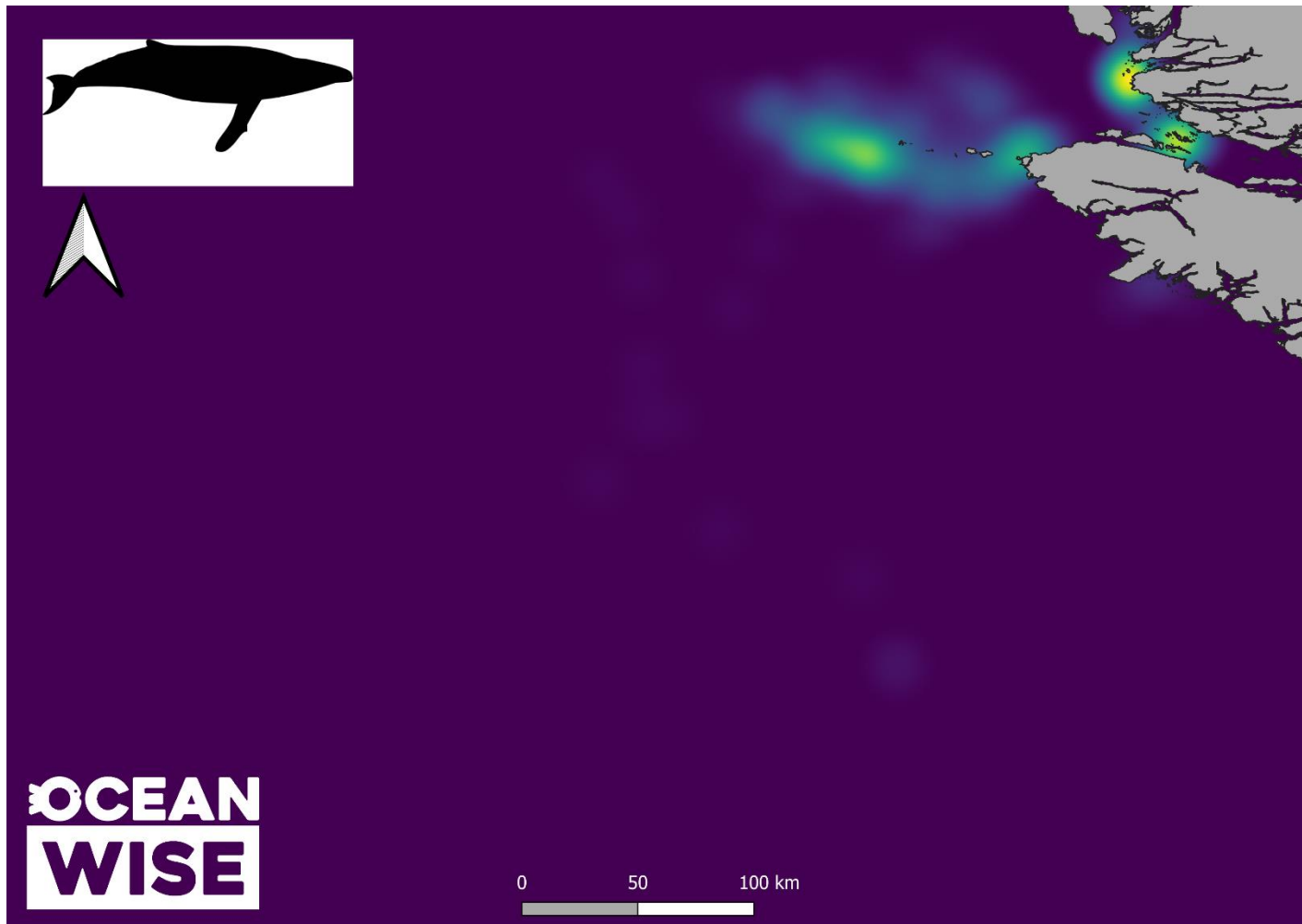
<b>Species common name</b>	<b>Number of sightings</b>
Blue whale	9
Dall's porpoise	121
Fin whale	62
Grey whale	147
Harbour porpoise	71
Humpback whale	687
Killer whale	97
Minke whale	30
Northern right whale dolphin	6
Pacific white-sided dolphin	111
Pilot whale	1
Risso's dolphin	5
Sei whale	1
Sperm whale	36

### **Top Reported Cetacean Species**

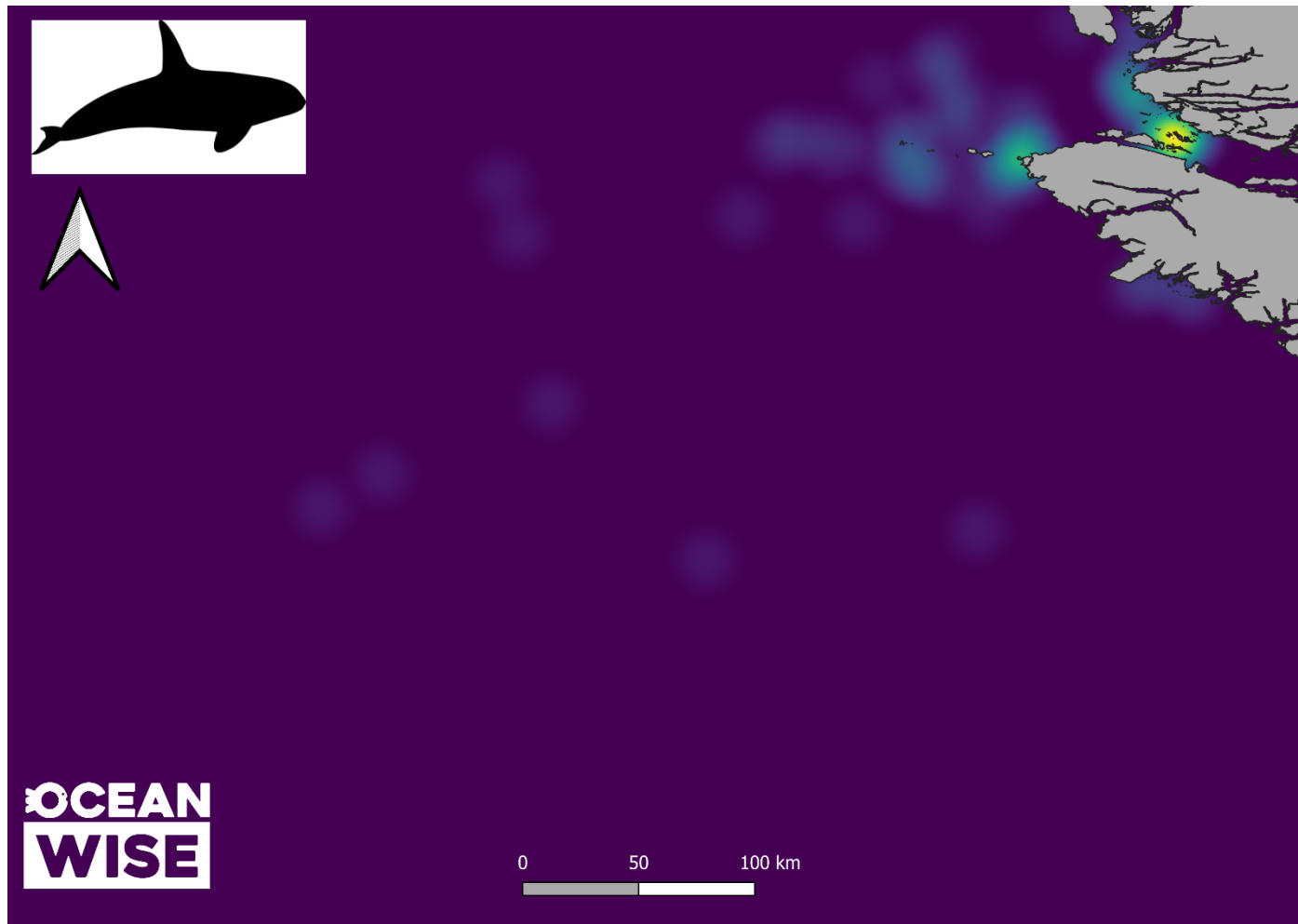
For humpback whales, most sightings were submitted to the west of the Scott Islands (Figure 24). There was also a cluster of sightings submitted from Queen Charlotte Strait.

Most killer whale sightings were submitted from Queen Charlotte Strait (Figure 25). There were also a large portion of sightings submitted from around the Scott Islands.

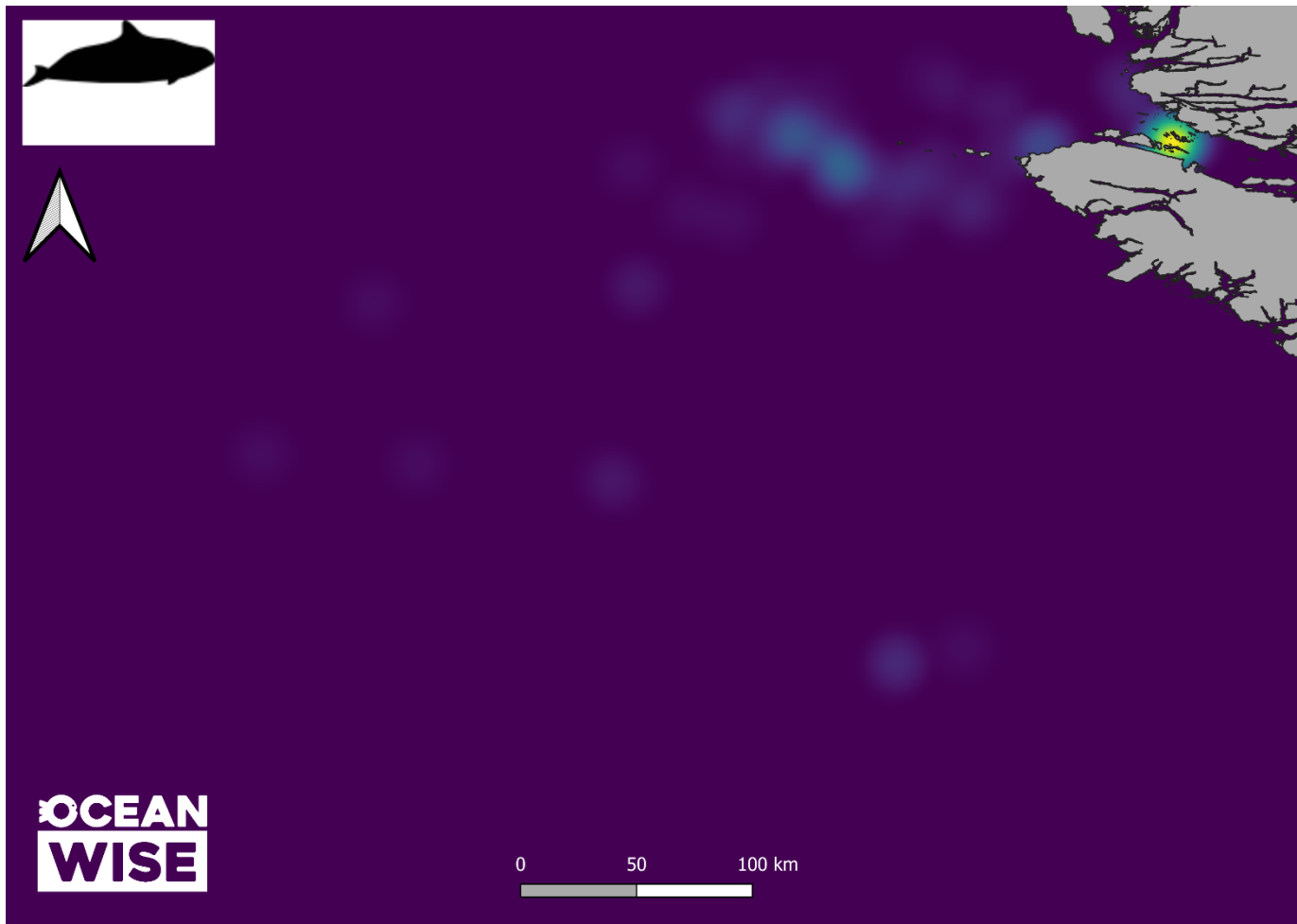
For Dall's porpoises, most sightings were submitted from Queen Charlotte Strait (Figure 26). There were also a large portion of sightings submitted west offshore from the Scott Islands.



**Figure 24.** Heatmap of humpback whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) and Other Effective Area-Based Conservation Measures (OECMs) in region 5. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 25.** Heatmap of killer whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) and Other Effective Area-Based Conservation Measures (OECMs) in region 5. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 26.** Heatmap of Dall's porpoise sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) and Other Effective Area-Based Conservation Measures (OECMs) in region 5. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.

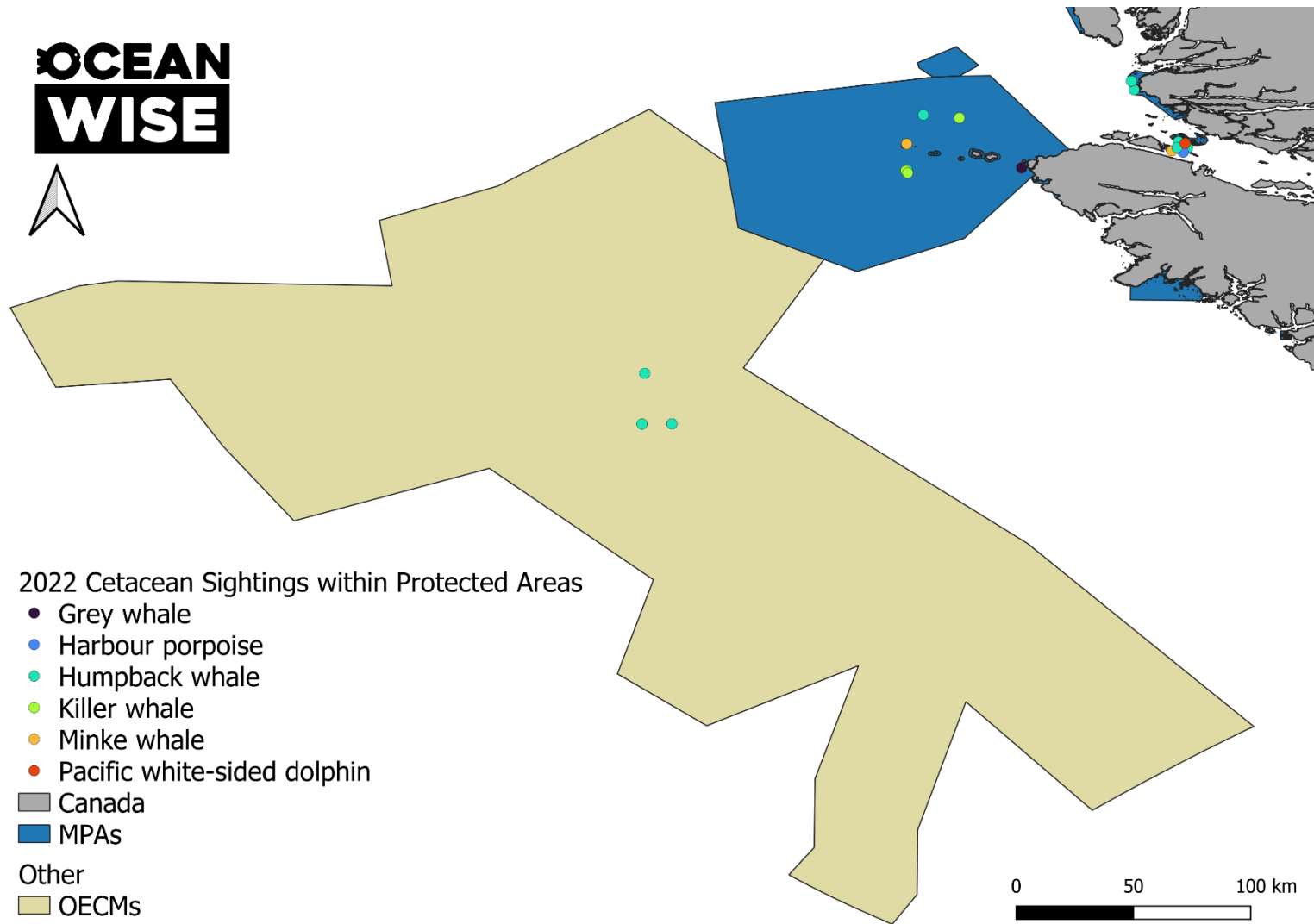
## 2022 Sightings Within Protected Areas

In 2022, there were 18 reports of cetaceans within MPAs/OECMs. Over half of the sightings were of humpback whales (10 sightings; Table 10; Figure 27).

**Table 10.** Identified cetacean species reported in 2022 alone within Marine Protected Areas (MPAs) and Other Effective Area-Based Conservation Measures (OECMs) in region 5.

Species common name	Number of sightings
Grey Whale	1
Harbour porpoise	1
Humpback whale	10
Killer whale	3
Minke whale	2
Pacific white-sided dolphin	1





**Figure 27.** Cetacean sightings (by species) submitted to the Ocean Wise Sightings Network (OWSN) in 2022 within Canadian and US Marine Protected Areas (MPAs) and Other Effective Area-Based Conservation Measures (OECMs) in region 5. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.



## REGION 6:

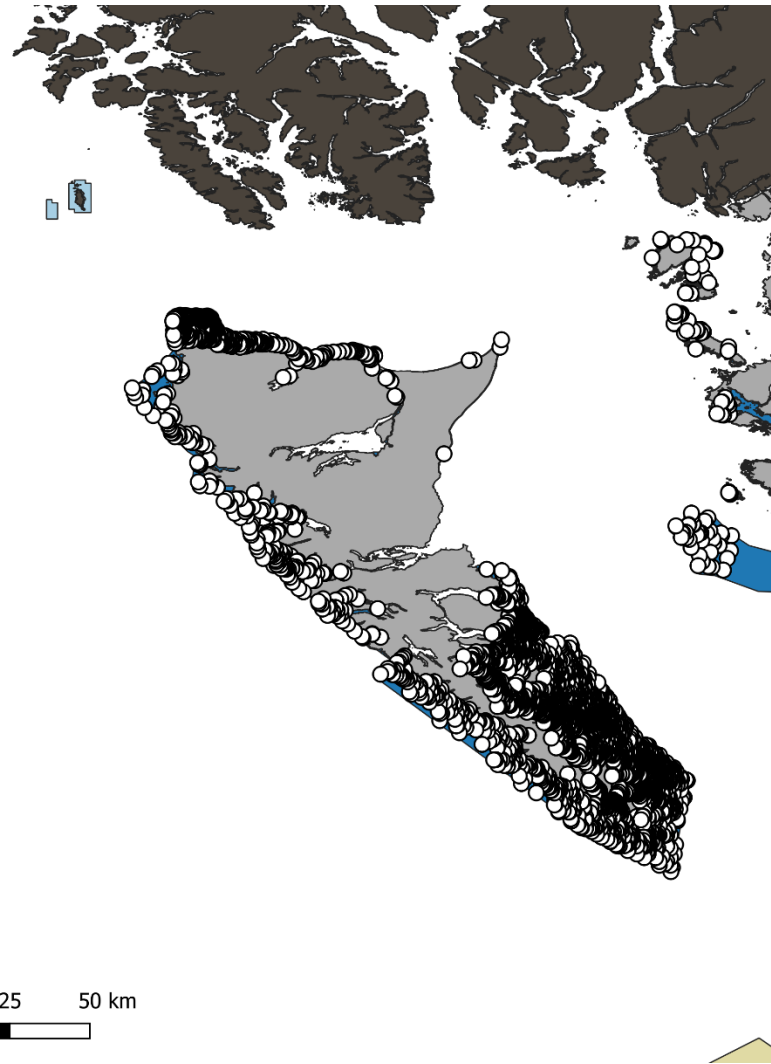
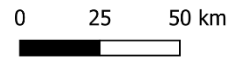
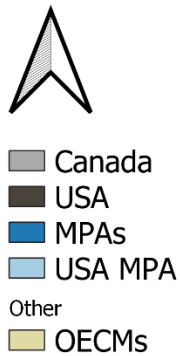
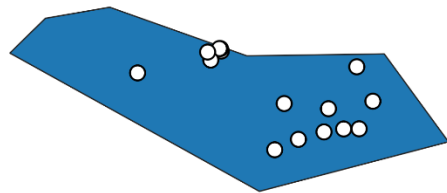
### Summary

Within region 6, there is a total of 12,612 cetacean sightings with a confidence of 'Probable' or 'Certain' within the OWSN database. The top three reported species in this region are humpback whale (7,254 sightings), killer whale (1,728 sightings), and Pacific white-sided dolphin (810 sightings).



### Historic Sightings Within Protected Areas

There was a total of 6,164 sightings within Canadian and US MPAs (Figure 28).



**Figure 28.** Cetacean sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) within Canadian and US waters in region 6. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.

**Table 11.** Identified cetacean species reported within region 6 Marine Protected Areas (MPAs) within Canadian and US waters 1958-2022.

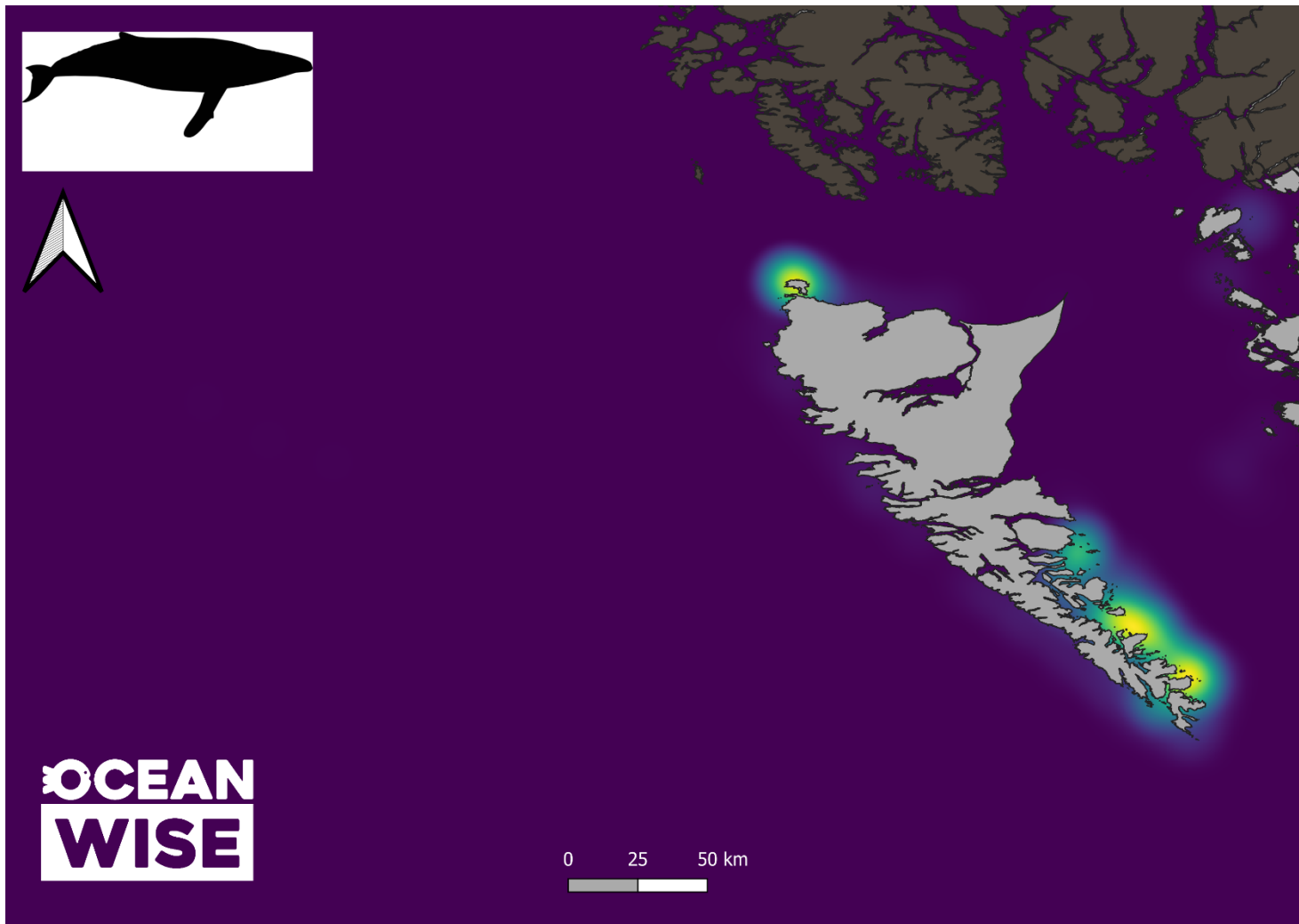
<b>Species common name</b>	<b>Number of sightings</b>
Blue whale	6
Cuvier's beaked whale	1
Dall's porpoise	173
False killer whale	1
Fin whale	199
Grey whale	128
Harbour porpoise	228
Humpback whale	3688
Killer whale	959
Minke whale	191
Northern right whale dolphin	4
Pacific white-sided dolphin	387
Risso's dolphin	132
Sei whale	1
Sperm whale	29

### **Top Reported Cetacean Species**

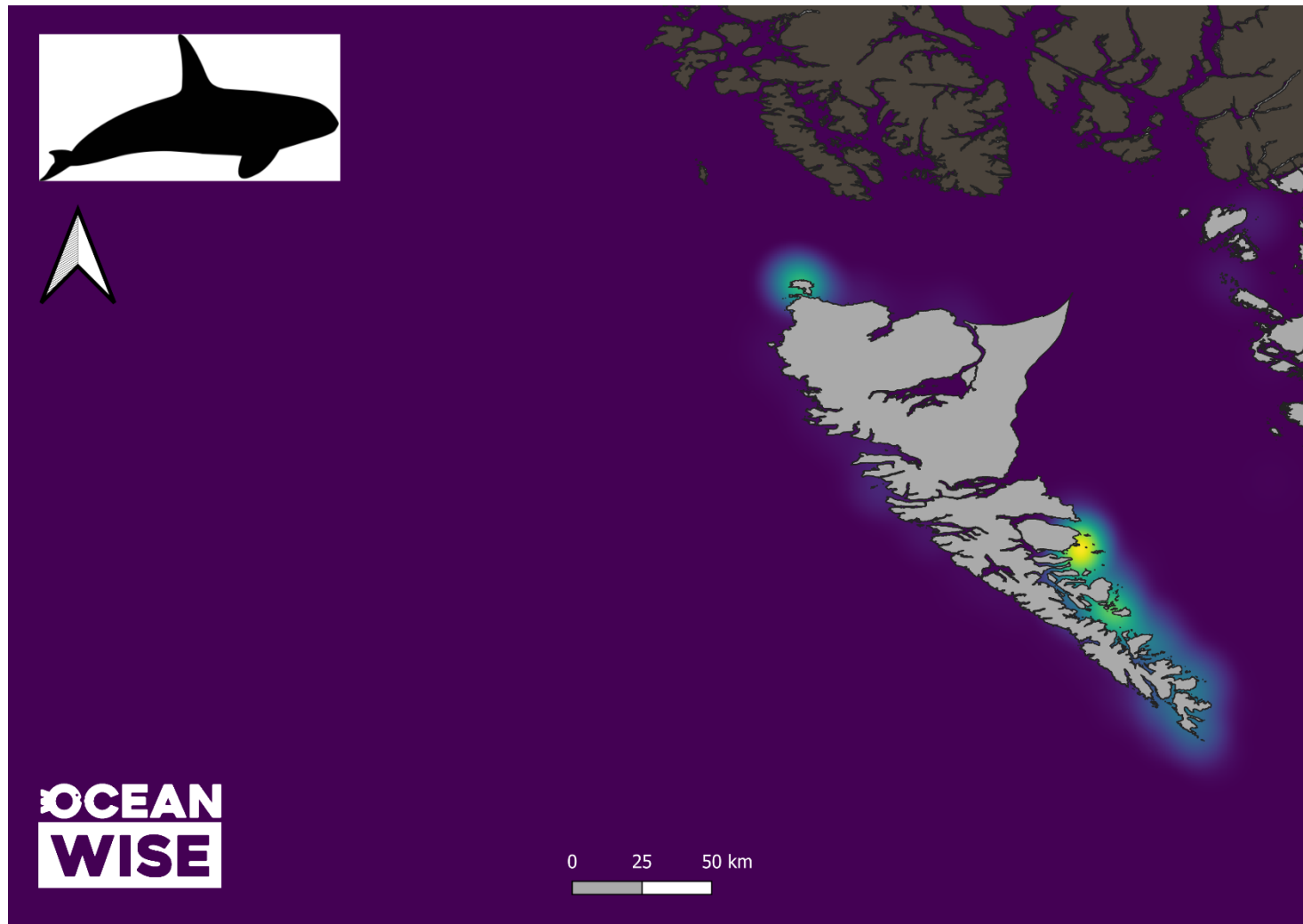
For humpback whales, most sightings were submitted from Gwaii Haanas (Figure 29). There was also a cluster of sightings submitted from Langara Island.

Most killer whale sightings were submitted from K'uuna Gwaay Conservancy (Figure 30). There were also a large portion of sightings submitted from Langara Island.

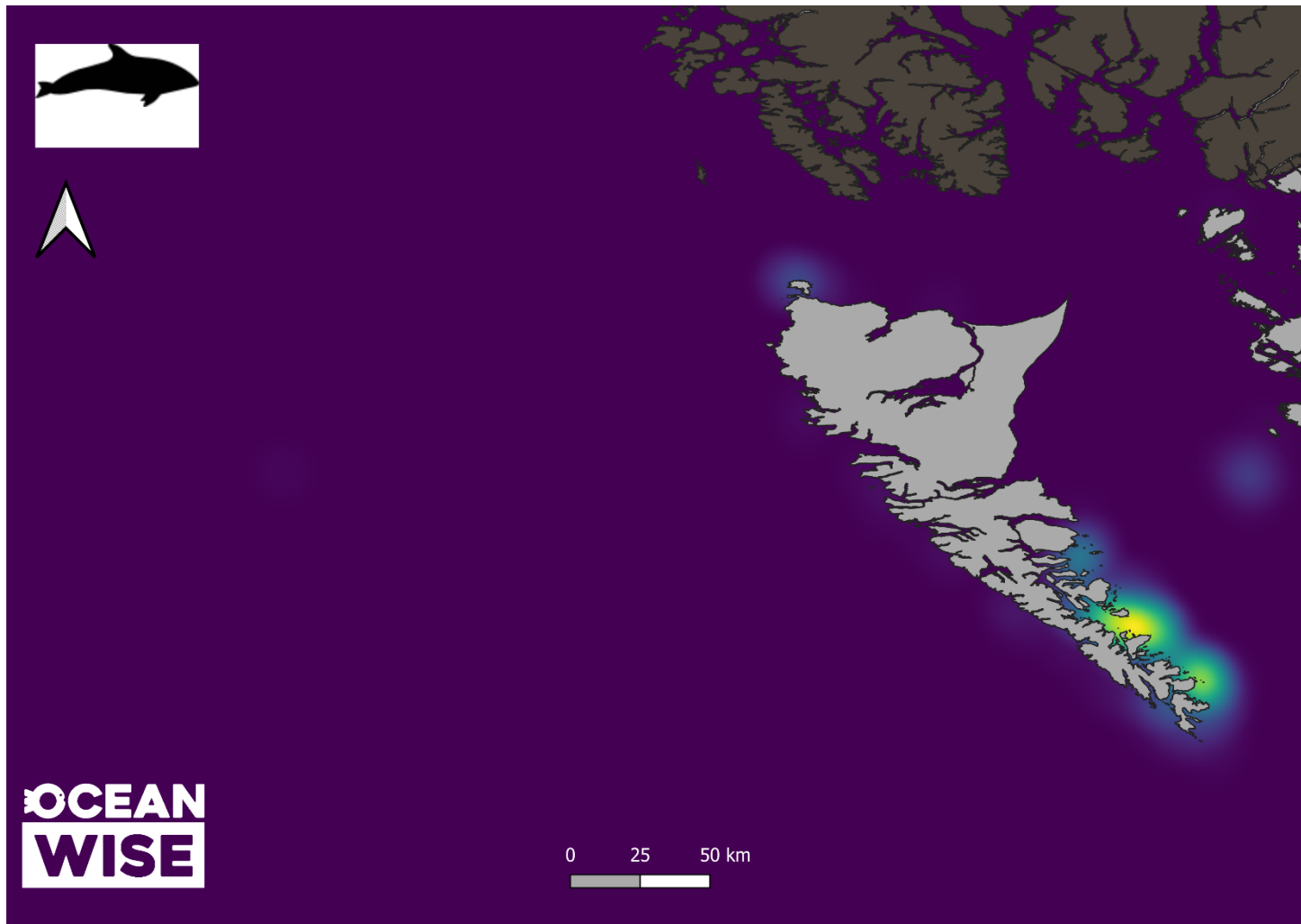
For Pacific white-sided dolphins, most sightings were submitted from south of Ramsay Island (Figure 31). There were also a large portion of sightings submitted from Gwaii Haanas.



**Figure 29.** Heatmap of humpback whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) region 6. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 30.** Heatmap of killer whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 6. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 31.** Heatmap of Pacific white-sided dolphin sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 6. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.

## 2022 Sightings Within Protected Areas

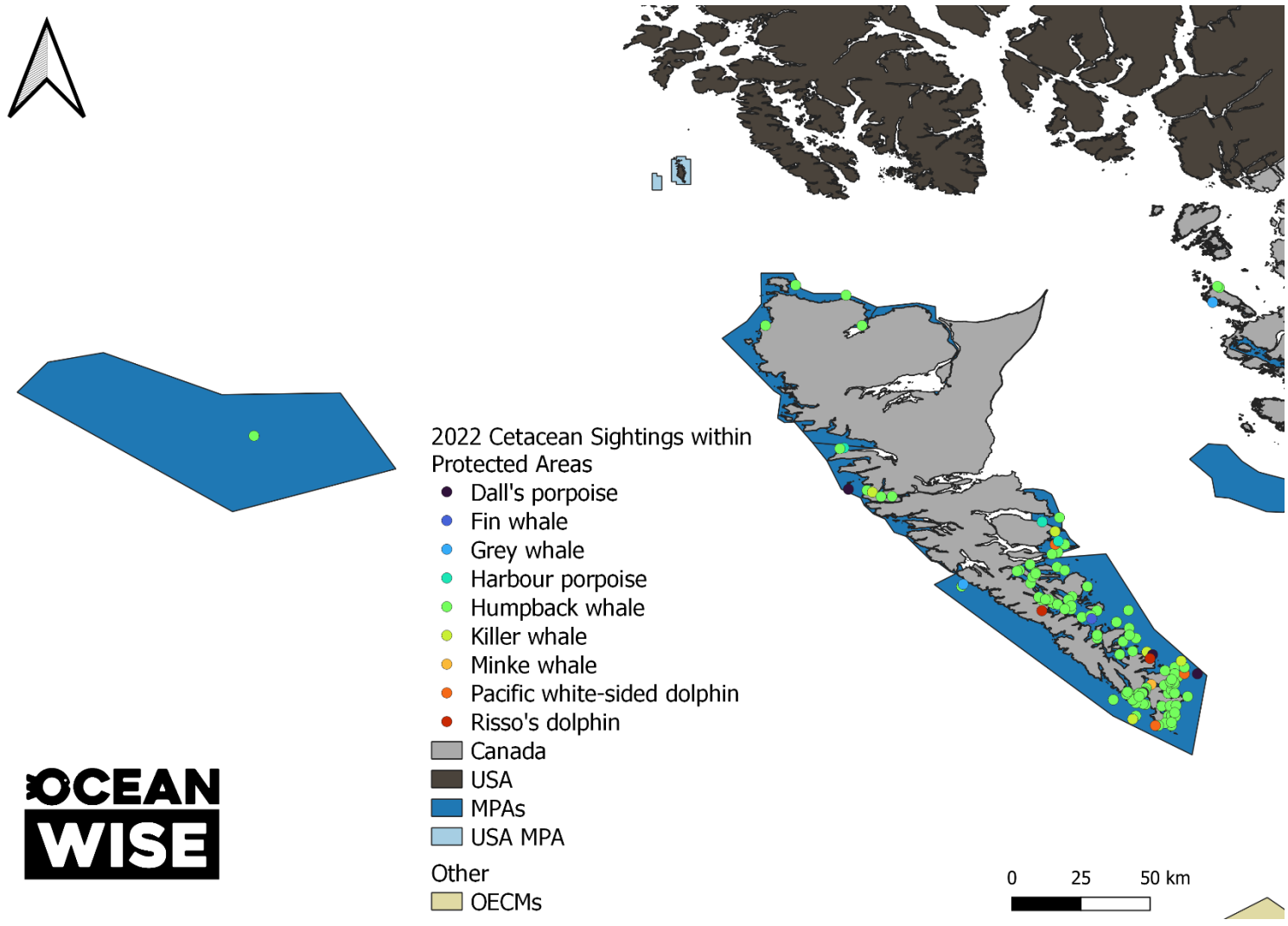
In 2022, there were 135 reports of cetaceans within MPAs. Over two thirds of the sightings were of humpback whales (110 sightings; Table 12; Figure 32).

**Table 12.** Identified cetacean species reported in 2022 alone within Marine Protected Areas (MPAs) and Other Effective Area-Based Conservation Measures (OECMs) in region 6.

Species common name	Number of sightings
Dall's porpoise	4
Fin whale	2
Grey Whale	2
Harbour porpoise	4
Humpback whale	110
Killer whale	7
Minke whale	1
Pacific white-sided dolphin	3
Risso's dolphin	2



*Dall's porpoise in Dixon Entrance. Credit: Naomi Tabata.*



**Figure 32.** Cetacean sightings (by species) submitted to the Ocean Wise Sightings Network (OWSN) in 2022 within Canadian and US Marine Protected Areas (MPAs) in region 6. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.



## REGION 7:

### Summary

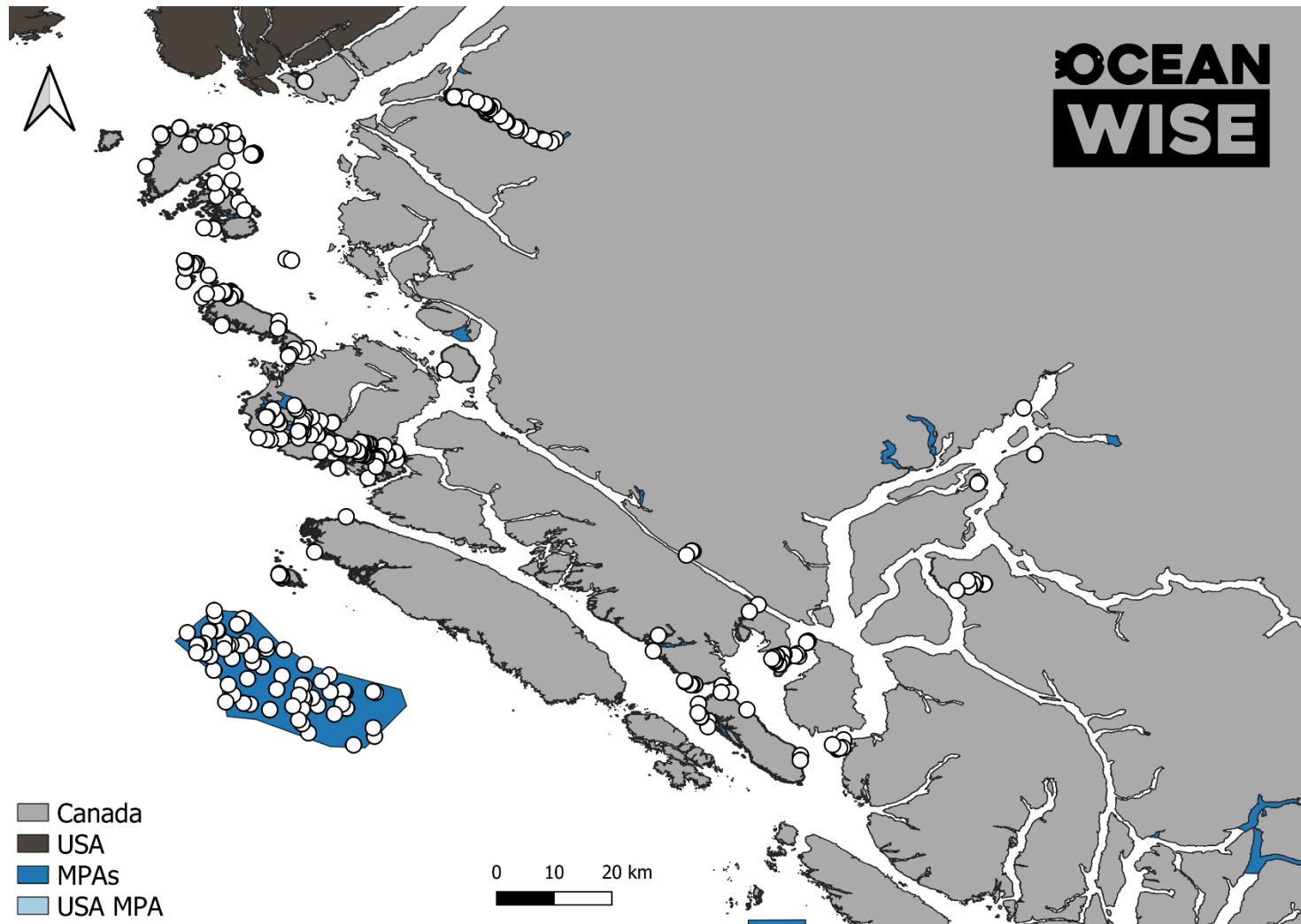
Within region 7, there is a total of 11,143 cetacean sightings with a confidence of 'Probable' or 'Certain' within the OWSN database. The top three reported species in this region are humpback whale (6,556 sightings), Dall's porpoise (1,366 sightings), and killer whale (1,264 sightings).



*Northern resident killer whale from Prince Rupert. Credit: David Leask.*

### Historic Sightings Within Protected Areas

There was a total of 468 sightings within Canadian MPAs (Figure 33).



**Figure 33.** Cetacean sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) within Canadian waters in region 7. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.

**Table 13.** Identified cetacean species reported within region 7 Marine Protected Areas (MPAs) within Canadian waters 1990-2022.

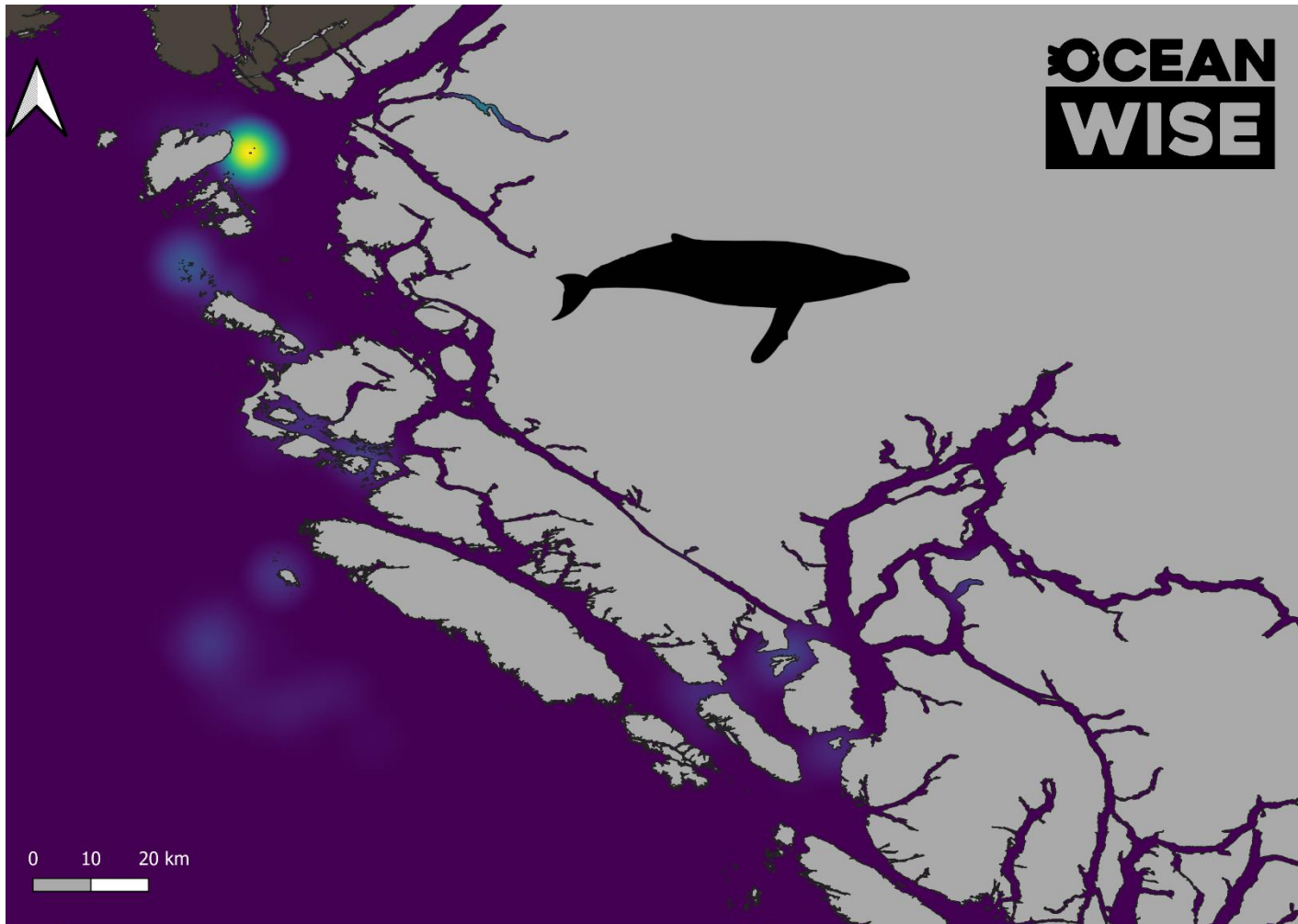
<b>Species common name</b>	<b>Number of sightings</b>
Dall's porpoise	20
Fin whale	14
Grey whale	11
Harbour porpoise	48
Humpback whale	267
Killer whale	68
Minke whale	4
Pacific white-sided dolphin	29

### **Top Reported Cetacean Species**

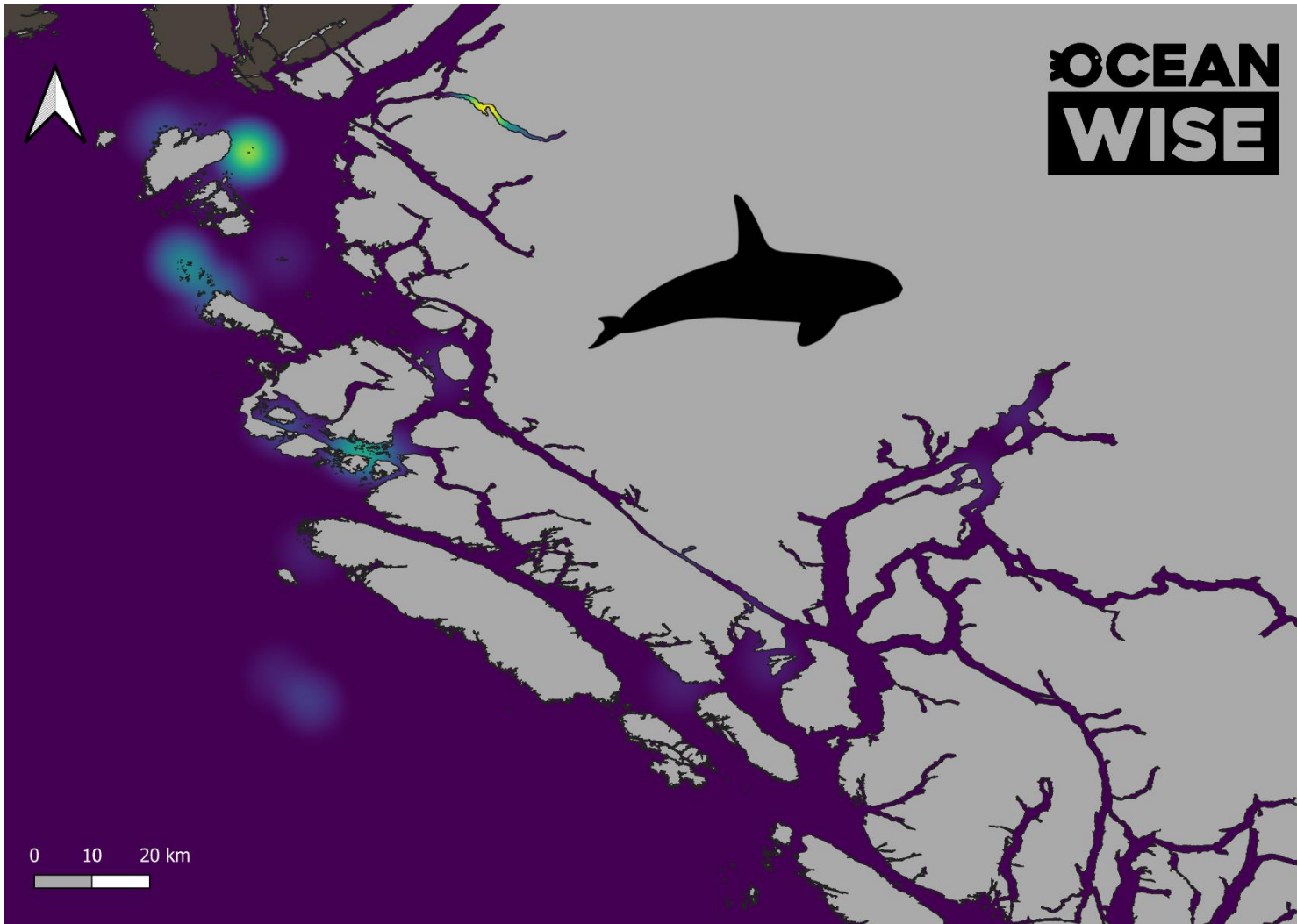
For humpback whales, most sightings were submitted from Holliday Passage and Green Island (Figure 34). There was also a cluster of sightings submitted from Triple Islands and Osborne Islands.

Most killer whale sightings were submitted from Holliday Passage, Green Island, and Khutzeymateen Inlet (Figure 35). There was also a cluster of sightings submitted from Kitkatla Channel.

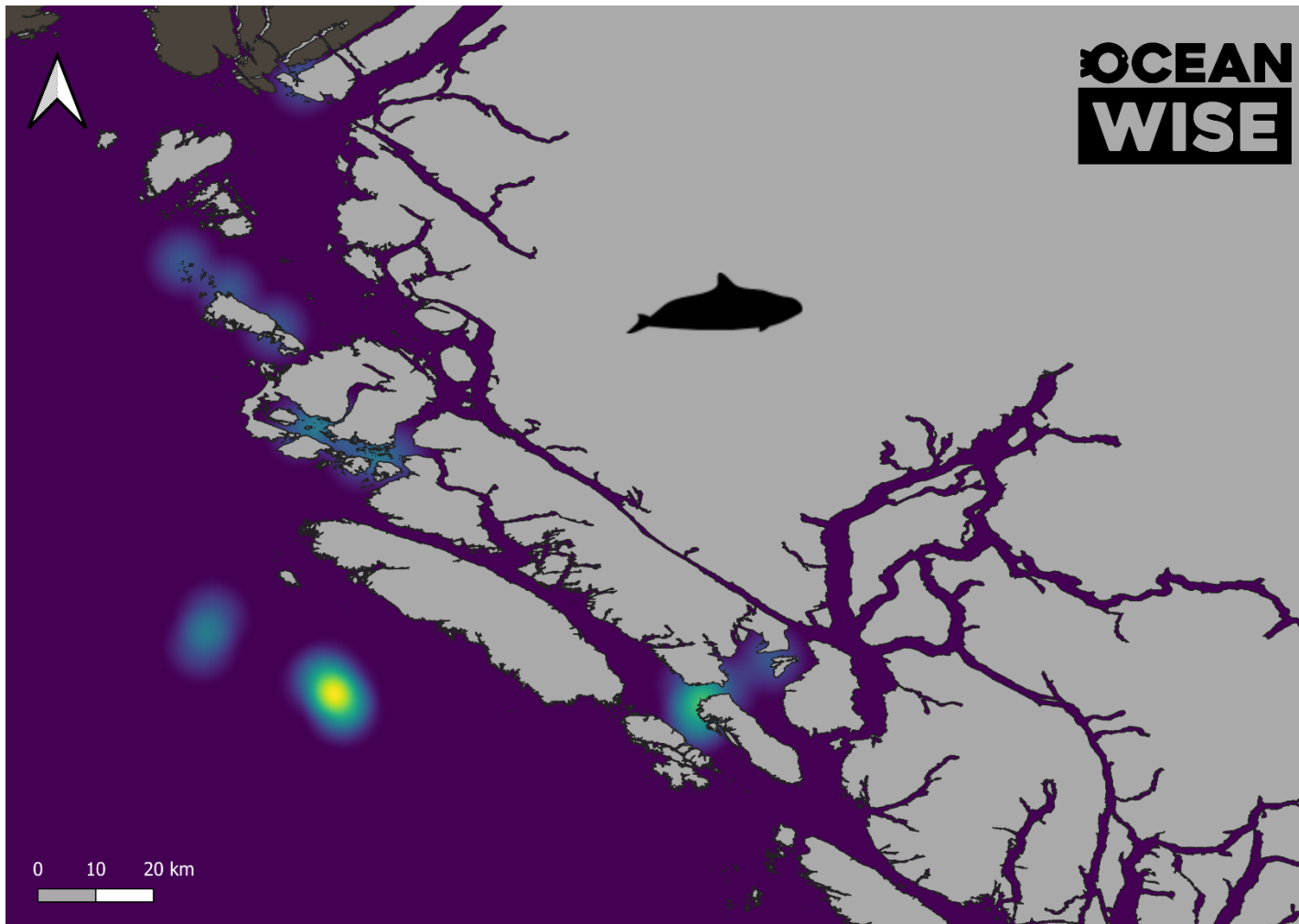
For Dall's porpoise, most sightings were submitted from Hecate Strait Glass Sponge Reefs (Figure 36). There were also a large portion of sightings submitted from Otter Passage.



**Figure 34.** Heatmap of humpback whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 7. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 35.** Heatmap of killer whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 7. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 36.** Heatmap of Dall's porpoise sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 7. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.

## 2022 Sightings Within Protected Areas

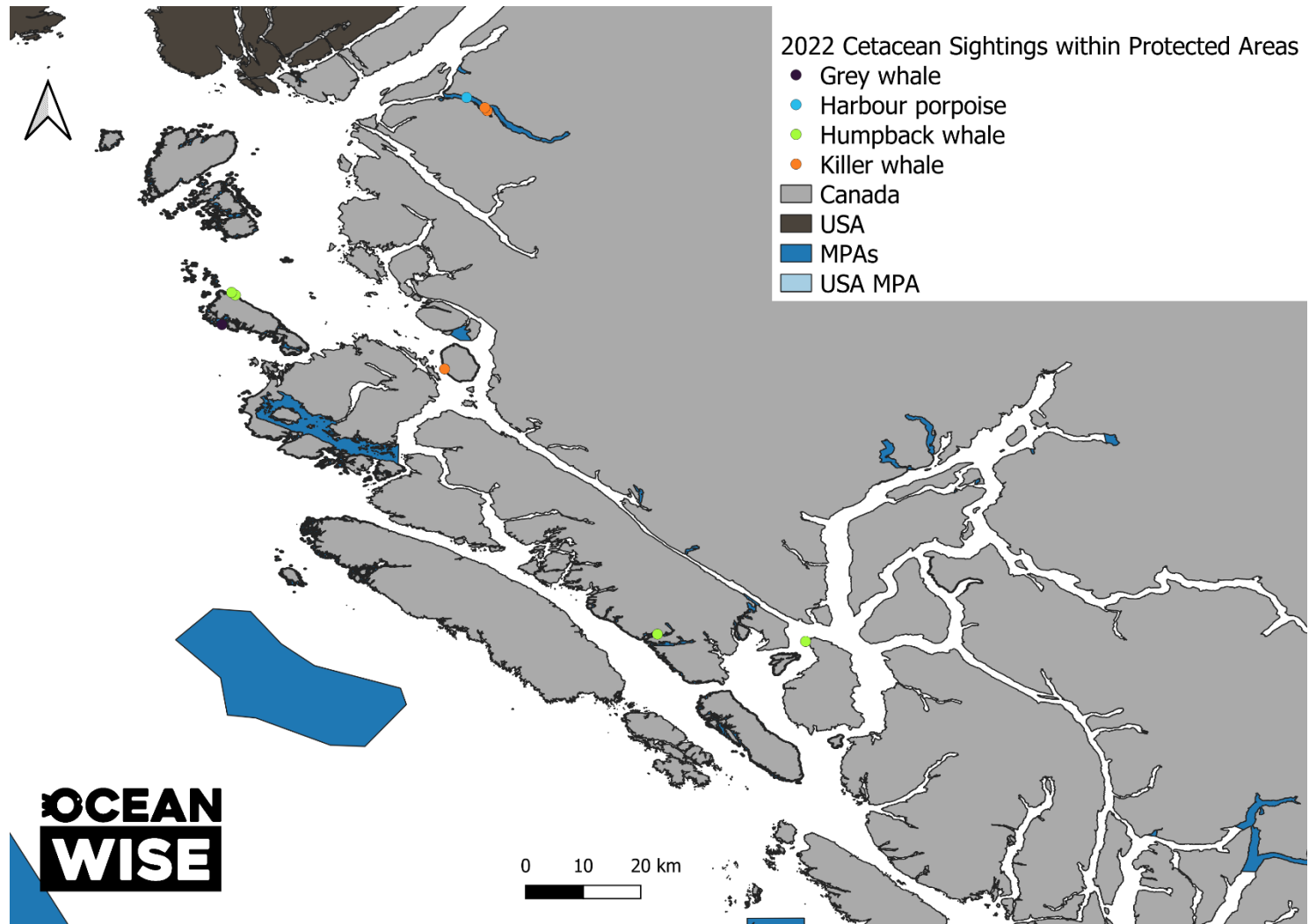
In 2022, there were 10 reports of cetaceans within MPAs. A majority of the sightings were of humpback whales and killer whales (4 sightings each; Table 14; Figure 37).

**Table 14.** Identified cetacean species reported in 2022 alone within Marine Protected Areas (MPAs) in region 7.

Species common name	Number of sightings
Grey Whale	1
Harbour porpoise	1
Humpback whale	4
Killer whale	4



*Humpback whale in Edye Passage. Credit: David Hoar.*



**Figure 37.** Cetacean sightings (by species) submitted to the Ocean Wise Sightings Network (OWSN) in 2022 within Canadian Marine Protected Areas (MPAs) in region 7. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.



Humpback whale off Bella Bella. Credit: Vincent Roche.

## REGION 8:

### Summary

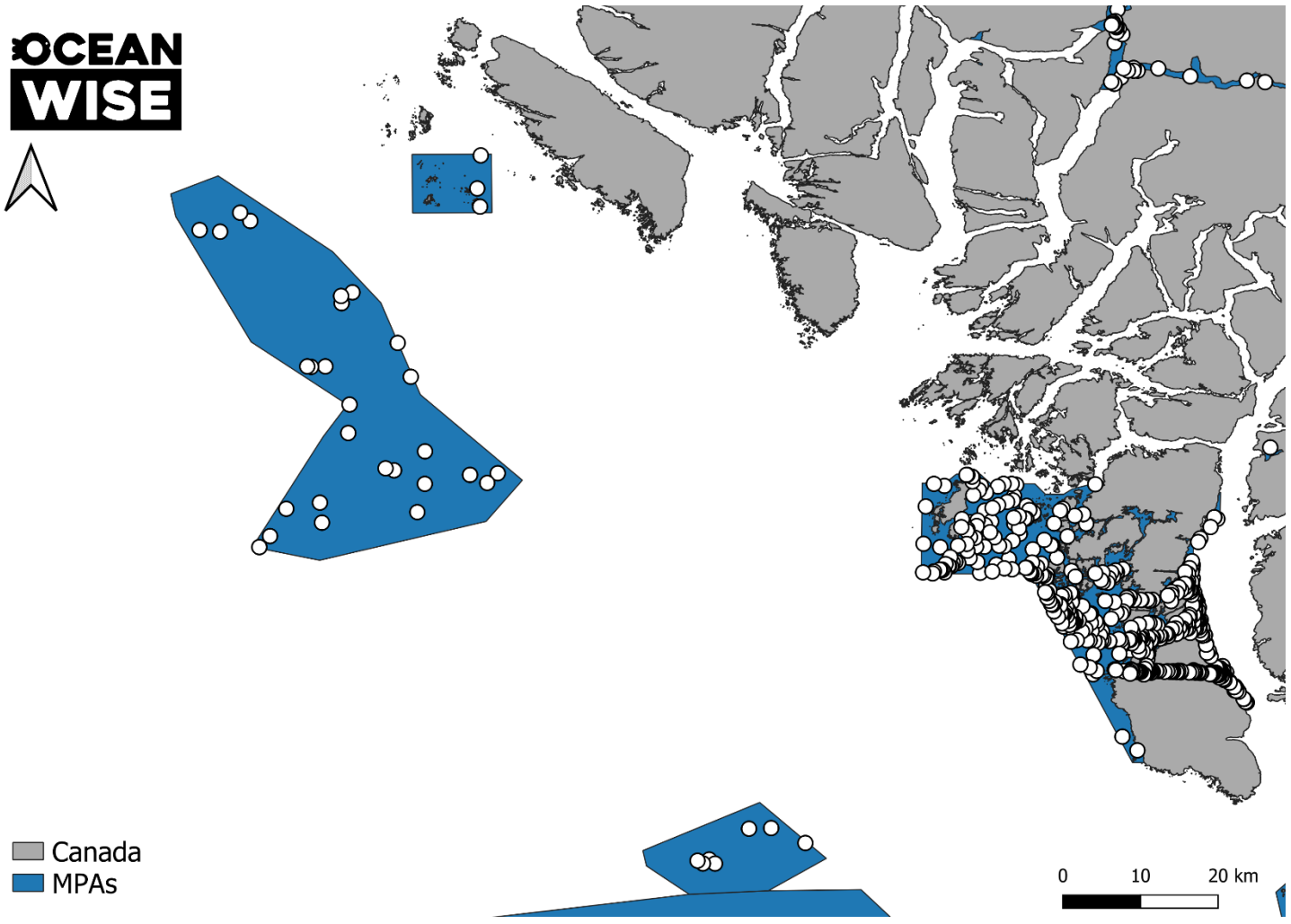
Within region 8, there is a total of 7,016 cetacean sightings with a confidence of 'Probable' or 'Certain' within the OWSN database. The top three reported species in this region are humpback whale (4,016 sightings), killer whale (910 sightings), and Dall's porpoise (700 sightings).



Humpback whale in Queens Sound. Credit: Josh Silverberg.

### Historic Sightings Within Protected Areas

There was a total of 606 sightings within Canadian MPAs (Figure 38).



**Figure 38.** Cetacean sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 8. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.

**Table 15.** Identified cetacean species reported within region 8 Marine Protected Areas (MPAs) within Canadian waters 1990-2022.

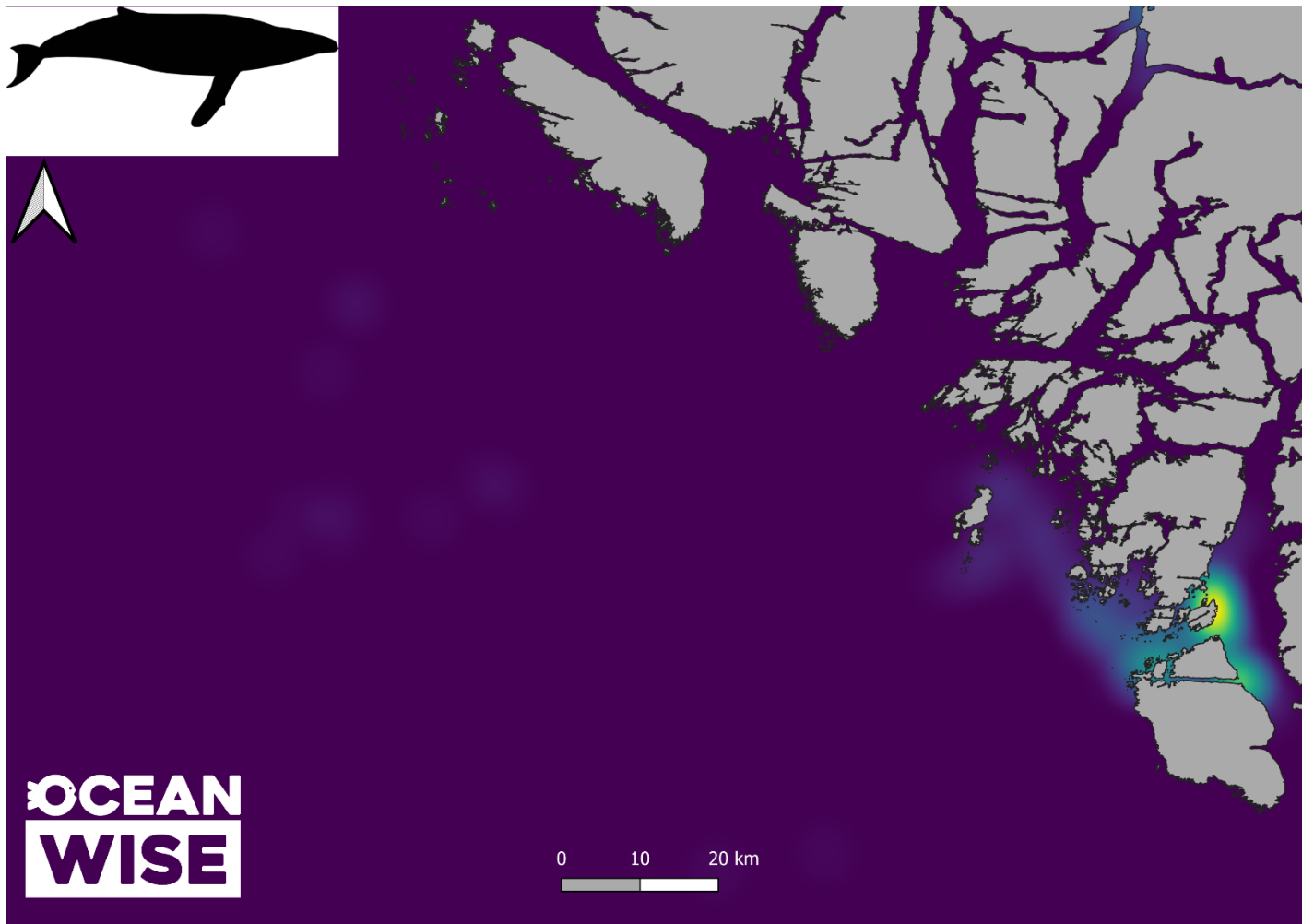
<b>Species common name</b>	<b>Number of sightings</b>
Dall's porpoise	55
Fin whale	10
Grey whale	2
Harbour porpoise	30
Humpback whale	341
Killer whale	96
Minke whale	7
Pacific white-sided dolphin	60

### **Top Reported Cetacean Species**

For humpback whales, most sightings were submitted from Nalau Passage and Tomahawk Island (Figure 39). There was also a cluster of sightings submitted from Hakai Passage and Queens Sound.

Most killer whale sightings were submitted from south of Kildidit Sound and between Duck and Gosling Island (Figure 40). There was also a cluster of sightings submitted from Hakai Passage.

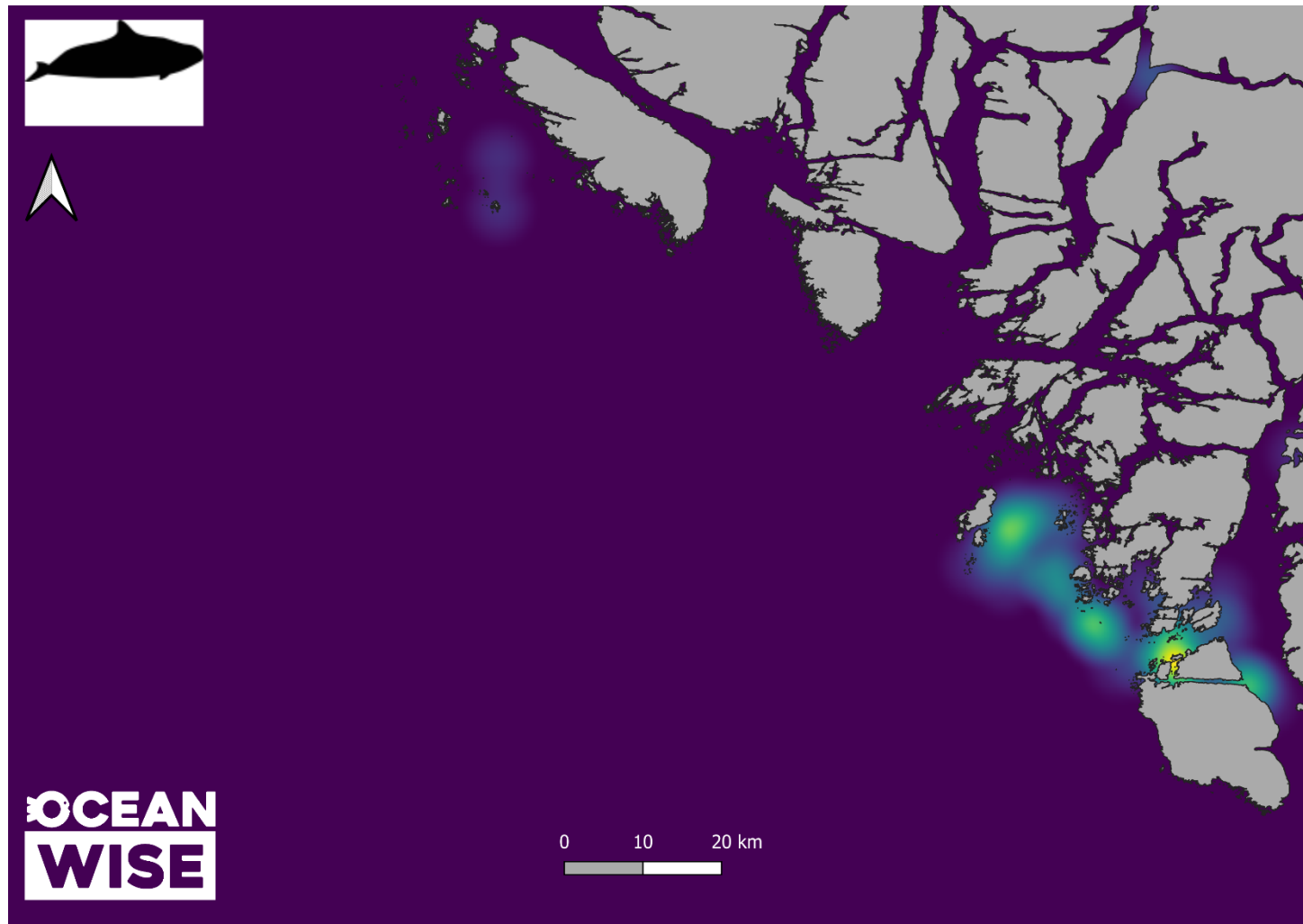
For Dall's porpoise, most sightings were submitted from Hakai Passage (Figure 41). There were also a large portion of sightings submitted from Queens Sound.



**Figure 39.** Heatmap of humpback whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 8. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 40.** Heatmap of killer whale sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 8. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.



**Figure 41.** Heatmap of Dall's porpoise sightings submitted to the Ocean Wise Sightings Network (OWSN) within Marine Protected Areas (MPAs) in region 8. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort. Purple indicates no sightings; bright yellow indicates high number of sightings.

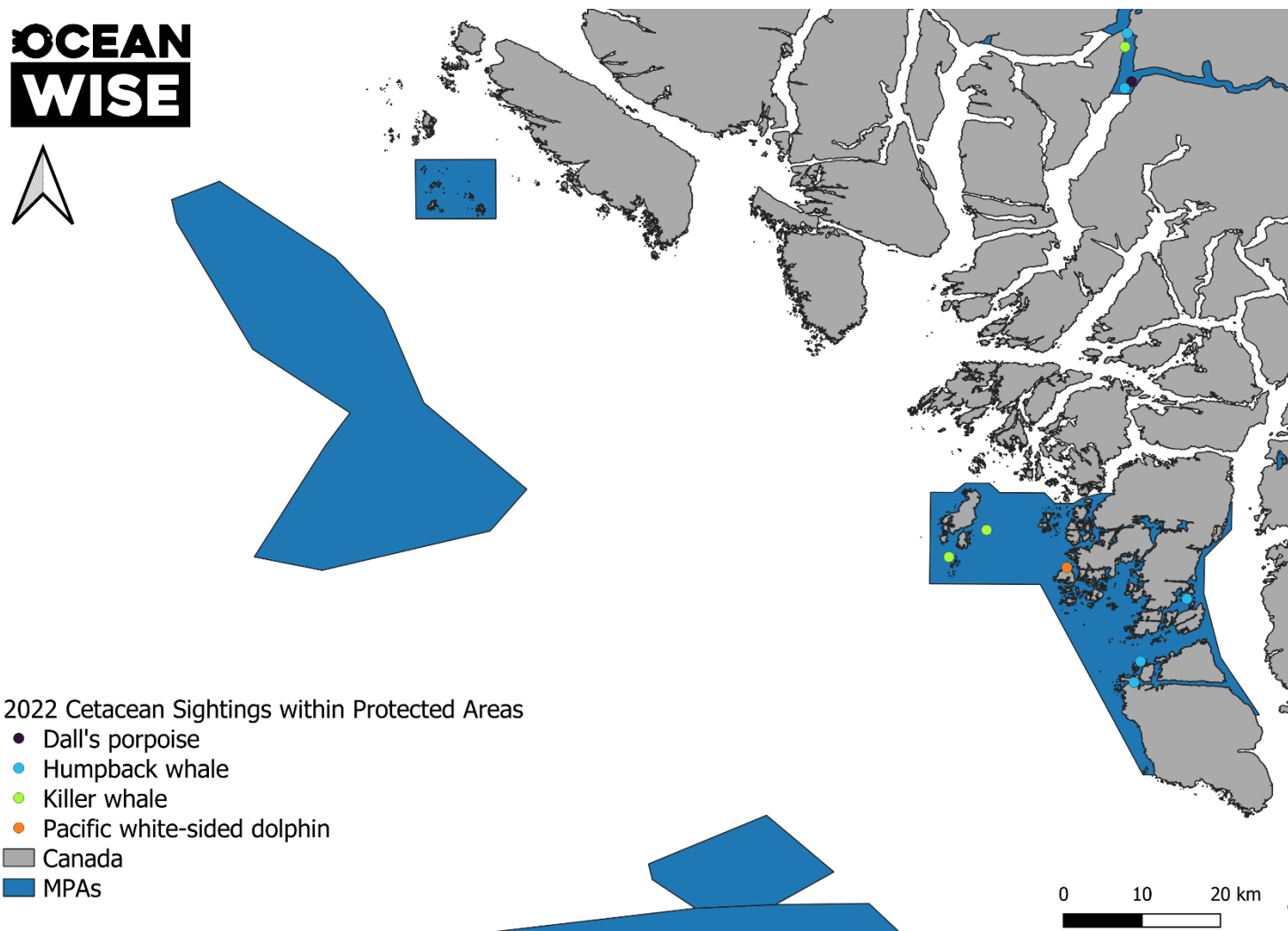
## 2022 Sightings Within Protected Areas

In 2022, there were 15 reports of cetaceans within MPAs. A majority of the sightings were of humpback whales (9 sightings; Table 16; Figure 42).

**Table 16.** Identified cetacean species reported in 2022 alone within Marine Protected Areas (MPAs) in region 8.

Species common name	Number of sightings
Dall's porpoise	1
Humpback whale	9
Killer whale	4
Pacific white-sided dolphin	1





**Figure 42.** Cetacean sightings (by species) submitted to the Ocean Wise Sightings Network (OWSN) in 2022 within Canadian Marine Protected Areas (MPAs) in region 8. Note: All sightings have a confidence rating of 'Probable' or 'Certain', data is opportunistic and not corrected for effort.

## ACKNOWLEDGEMENTS

We would like to give a big thank you to all the people and organizations that submit sightings to us - We are so grateful for your countless hours of time, for collecting valuable data on cetaceans in our waters and for helping to bolster the WRAS as a ship strike mitigation tool in Canadian and US waters. We would also like to acknowledge that this report would not be possible without the funding received through Fisheries and Oceans Canada's Ocean Management Fund (2022-2023).

## ADDITIONAL INFORMATION

### WhaleReport

Anyone can download the WhaleReport app for free (Android and iOS) to report sightings of whales, dolphins and porpoises in BC and Washington State. Visit our website to learn more: <https://ocean.org/action/send-a-sighting-save-a-whale/>.

### The Whale Trail

Interested in finding out the Whale Trail sign closest to you? You can find information about all of the Whale Trail sign locations in Canada and US on their website: <https://thewhaletrail.org/>.

### Be Whale Wise Guidelines

Make sure you are aware of the current marine mammal regulations in Canadian and US waters by visiting the Be Whale Wise website: <https://www.bewhalewise.org/>.

### DFO Reporting Hotline

To report a distressed or dead marine mammal or sea turtle in Pacific waters, please contact the DFO BC Marine Mammal Response Network (Observe, Record, Report):

- Phone: 1-800-465-4336
- Email: DFO.ORR-ONS.MPO@dfo-mpo.gc.ca
- Radio: VHF Channel 16

# APPENDIX

**Table A1.** Some of the First Nations, sightings networks, and organizations that have reported cetacean sightings\* within the eight map regions (Figure 1).

<b>Map region</b>	<b>Region description</b>	<b>First Nation/ Organizations/Sighting Network</b>
1	Southern Salish Sea, Puget Sound and Strait of Juan de Fuca	BC Ferries BC Coast Pilots Black Ball Transport Cetus Research & Conservation Society Cowichan Tribes Eagle Wing Tours Fisheries and Oceans Canada Five Star Whale Watching Kitsap Transit Malahat First Nation Maple Leaf Adventures Maya's Legacy Whale Watching Ocean Wise (South Coast) Ocean Ecoventures Orca Network Orcasound Orca Spirit Adventures Pacific Whale Watch Association Pacific Wild Parks Canada Pauquachin First Nation Pender Sighting Network Prince of Whales Adventures Puget Sound Pilots

		<p>Raincoast Conservation Foundation</p> <p>Saam Smit Towage</p> <p>San Juan Safaris</p> <p>Saturna Island Parks Liaison Committee</p> <p>Saturna Island Marine Research and Education Society (SIMRES)</p> <p>Seaspan International Ltd</p> <p>Seattle Aquarium</p> <p>Simon Fraser University</p> <p>SoundWatch</p> <p>Southern Gulf Islands Whale Sightings Network (SGIWSN)</p> <p>Spirit of Orca Whale &amp; Wildlife Tours</p> <p>Steveston Seabreeze Adventures</p> <p>The Whale Museum</p> <p>Transport Canada</p> <p>T'Souke Nation</p> <p>University of British Columbia</p> <p>Vancouver Fraser Port Authority</p> <p>Vancouver Island Whale Watch</p> <p>Washington State Department of Transportation</p> <p>Washington State Ferries</p> <p>Wild Whales Vancouver</p> <p>Western Prince Whale and Wildlife Tours</p>
2	Mid-southern Salish Sea	<p>BC Ferries</p> <p>BC Coast Pilots</p> <p>Campbell River Whale Watching</p> <p>Campbell River Whale and Bear Excursions</p>

		<p>Cermaq Canada Ltd</p> <p>Cowichan Tribes</p> <p>Fisheries and Oceans Canada</p> <p>Homalco Wildlife &amp; Cultural Tours</p> <p>Mitlenatch Island Stewardship Team</p> <p>Mowi Canada (Marine Harvest)</p> <p>Ocean Ecoventures</p> <p>Pacific Whale Watch Association</p> <p>Parks Canada</p> <p>Raincoast Conservation Foundation</p> <p>Saam Smit Towage</p> <p>Seaspan International Ltd</p> <p>Simon Fraser University</p> <p>Tlowitsis First Nation</p> <p>Transport Canada</p> <p>University of British Columbia</p> <p>Vancouver Island Whale Watch</p> <p>Vancouver Fraser Port Authority</p> <p>Wild Whales Vancouver</p>
3	West coast of Vancouver Island	<p>Bamfield Marine Sciences Centre</p> <p>BC Coast Pilots</p> <p>Cedar Coast Field Station</p> <p>Clayoquot Wilderness Lodge</p> <p>Fisheries and Oceans Canada</p> <p>Jamie's Whaling Station</p> <p>Parks Canada</p> <p>Pacific Rim National Park Reserve</p>

		Strawberry Isle Marine Education and Research Society (SIMRS) Transport Canada
4	Northeast Vancouver Island	BC Ferries BC Coast Pilots Fisheries and Oceans Canada Kingfisher Wilderness Adventures Marine Education and Research Society (MERS) Parks Canada Raincoast Conservation Foundation Salmon Coast Field Station Stubbs Island Whale Watching Transport Canada
5	Offshore	Fisheries and Oceans Canada Transport Canada
6	Haida Gwaii and offshore Haida Gwaii	BC Ferries Fisheries and Oceans Canada Gwaii Haanas National Park Reserve Laskeek Bay Conservation Society Moresby Explorers North Pacific Seaplanes Transport Canada
7	Chatham Sound and north Hecate Strait	BC Ferries BC Coast Pilots Bluewater Adventures Fisheries and Oceans Canada Khutzeymateen Wilderness Lodge Metlakatla Guardian Watchmen

		North Pacific Seaplanes Ocean Wise (North Coast) Prince Rupert Port Authority Sunset Charters Transport Canada West Coast Launch
8	South Hecate Strait and central coast	BC Ferries BC Coast Pilots Fisheries and Oceans Canada Hakai Institute Heiltsuk Fisheries Ocean Light II Adventures Transport Canada

\* Note: Only First Nations, sightings networks, and organizations that have reported more than 5 sightings are listed here.

Report prepared by Dr. Chloe Robinson (Senior Manager of Conservation Impact), Whales Initiative

Maps and photos included in this report are not for further distribution

If you have any questions about this report, please contact [chloe.robinson@ocean.org](mailto:chloe.robinson@ocean.org)

