

**City of Vancouver: Oil Spill Scenario - First Narrows, April 25th, 2 hours**

**Legend**

- ✖ Spill Origin
- Predicted Oil Spill Spread
- Municipalities
- Aquarium Water Intake
- ✳ Marinas
- Port Metro Vancouver Terminals
- Population Density (ppl/sq km)
 

	< 500		5,000 - 10,000
	500 - 1,000		10,000 - 50,000
	1,000 - 5,000		> 50,000
- Spring Scoter Sightings Low ● ● High
- ✳ Cormorant Colonies
- ✳ Osprey Nests
- ✳ Great Blue Herons \*
- ✳ Historic Nest Sites
- Foraging Areas
- 🌿 Salmon Stream Mouths
- Herring Spawn Activity
- Parks and Protected Areas  
Data missing for: Belcarra, Burnaby, Port Moody, UBC, West Vancouver.
- Shoreline Types**

	Estuary, marsh		Rock
	Gravel and sand beach, flat		Rock with gravel, sand
	Man made		Sand beach, flat
	Mud flat		
- \* Data from 2008. Newer nests/colonies not shown.

Mapping oil spill extent was done by Living Oceans Society based on modelling output for a spill of non-weathering oil. Diluted bitumen behaves differently (probably more sinks as time elapses after a spill) and models predicting spill behaviour of diluted bitumen are not available. The oil slick shown represents oil with a minimum thickness of 0.1 mm, beyond which it breaks up into separate fragments (UNEP GPA). Model developed by Genwest systems and commissioned by the City of Vancouver, the City of Burnaby and the Tsleil-Waututh Nation.



**Oiled Surf Scoter**  
Photo: Brocken Inaglorly

**2 hours**

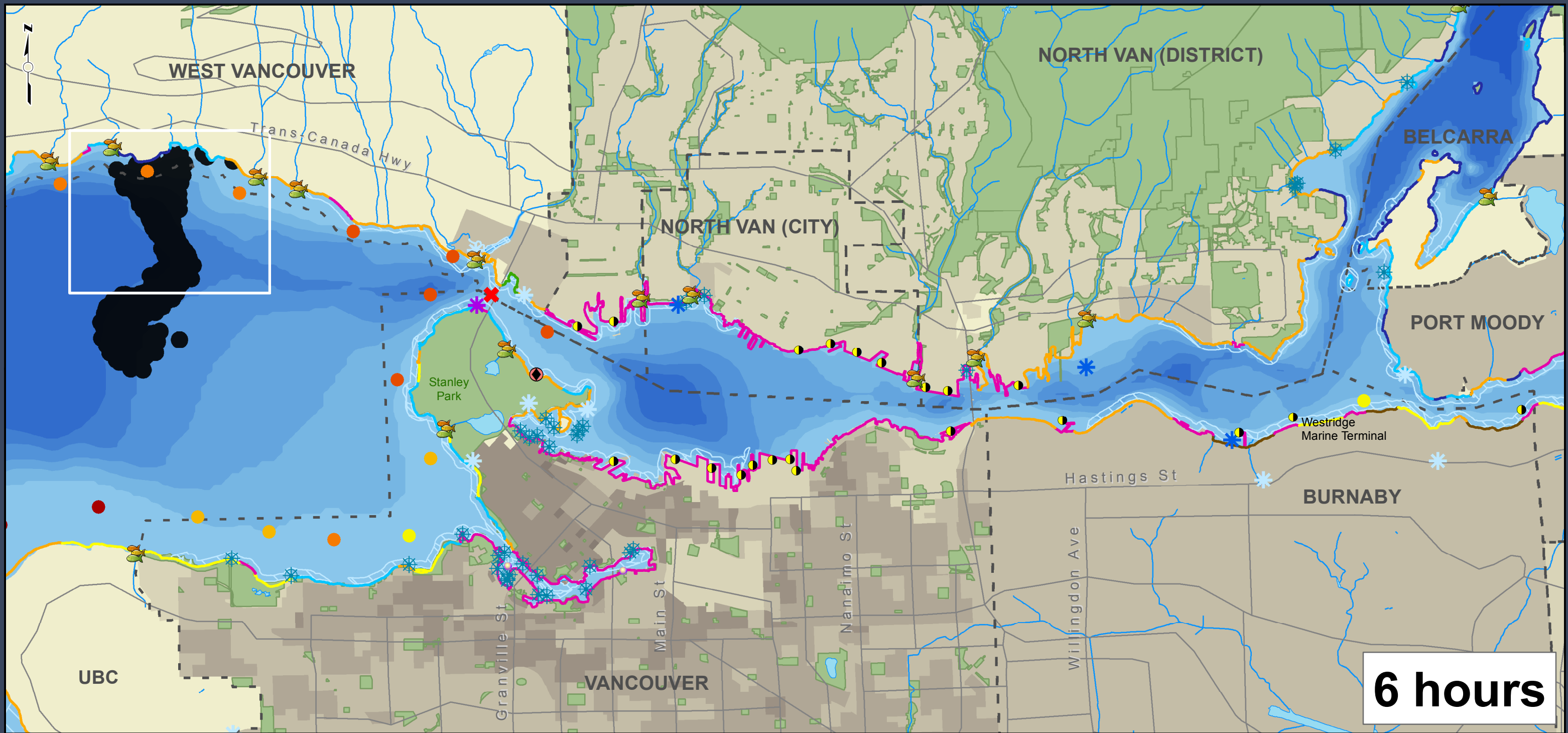
**Data Sources:**  
Bird Studies Canada, BCMCA, BIEAP, CCEA, City of North Vancouver, City of Vancouver, DataBC, District of North Vancouver, Living Oceans, Parks Canada, Squamish Streamkeepers, Statistics Canada - 2011 Census

**Base Data:**  
Canadian Hydrographic Service, DataBC, Geogratis - Atlas of Canada  
**Projection:** BC Albers NAD83

0 0.75 1.5 2.25 3 km

1:65,000 \*

\* Written scales are approximate and are based on a 11 x 17 inch paper size.  
Prepared for City of Vancouver: April 23, 2015



**City of Vancouver: Oil Spill Scenario - First Narrows, April 25th, 6 hours**

**Legend**

✖ Spill Origin

■ Predicted Oil Spill Spread

▭ Municipalities

⦿ Aquarium Water Intake

⚓ Marinas

● Port Metro Vancouver Terminals

Population Density (ppl/sq km)

< 500	5,000 - 10,000
500 - 1,000	10,000 - 50,000
1,000 - 5,000	> 50,000

Spring Scoter Sightings

Low High

✳ Cormorant Colonies

⚡ Osprey Nests

Great Blue Herons \*

⚡ Historic Nest Sites

□ Foraging Areas

🌿 Salmon Stream Mouths

● Herring Spawn Activity

Shoreline Types

— Estuary, marsh

— Gravel and sand beach, flat

— Man made

— Mud flat

■ Parks and Protected Areas

Data missing for: Belcarra, Burnaby, Port Moody, UBC, West Vancouver.

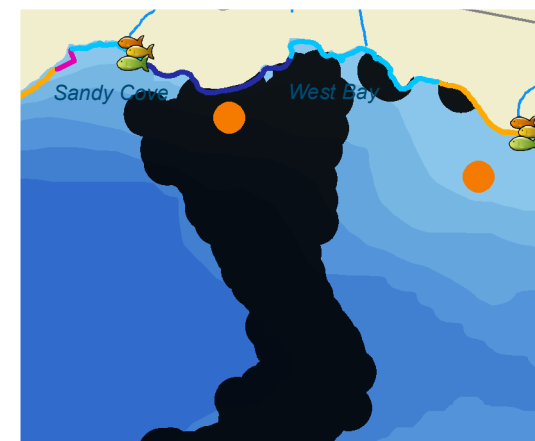
— Rock

— Rock with gravel, sand

— Sand beach, flat

\* Data from 2008. Newer nests/colonies not shown.

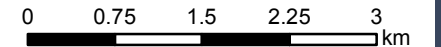
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**6 hours**

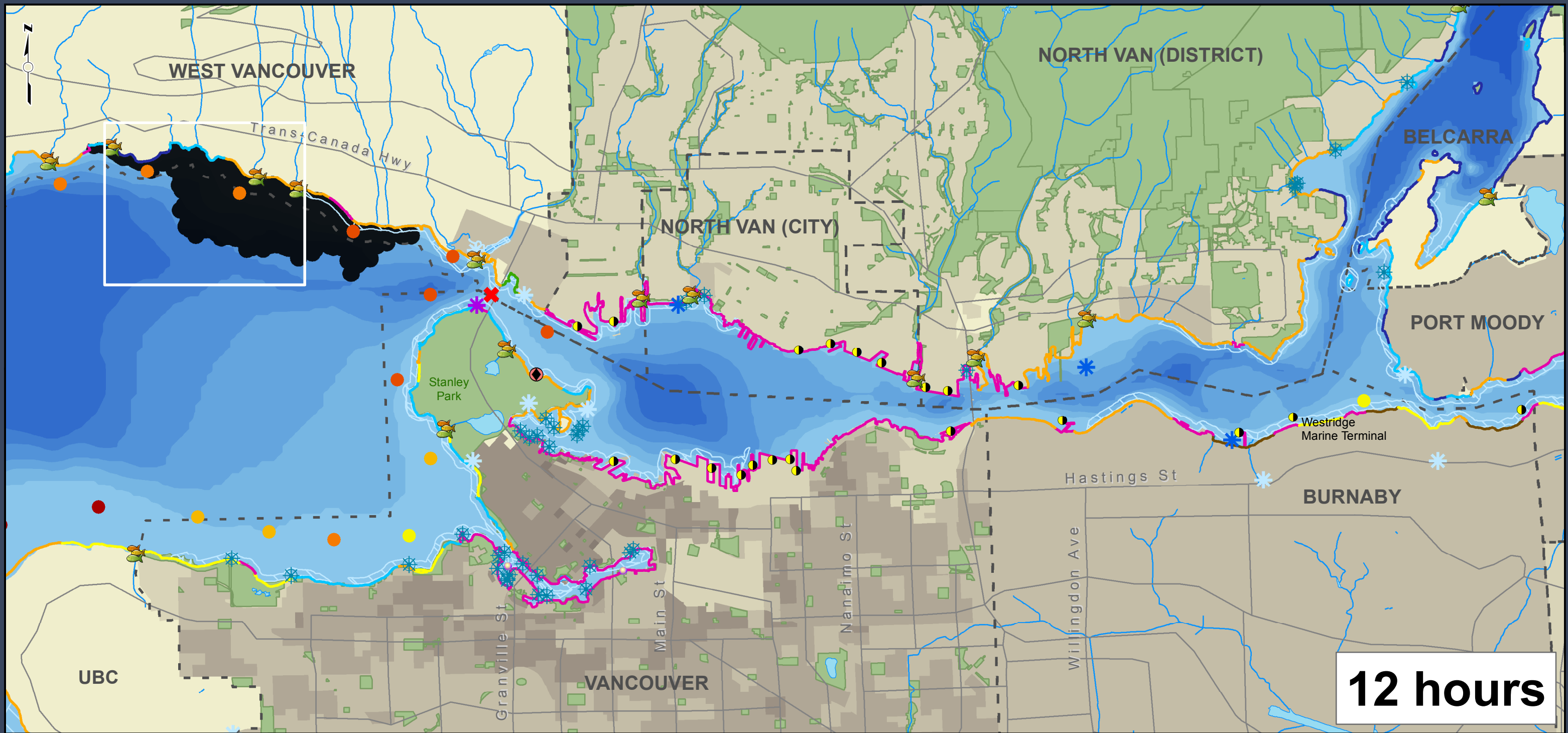
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1:65,000 \*  
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**12 hours**

**City of Vancouver: Oil Spill Scenario - First Narrows, April 25th, 12 hours**

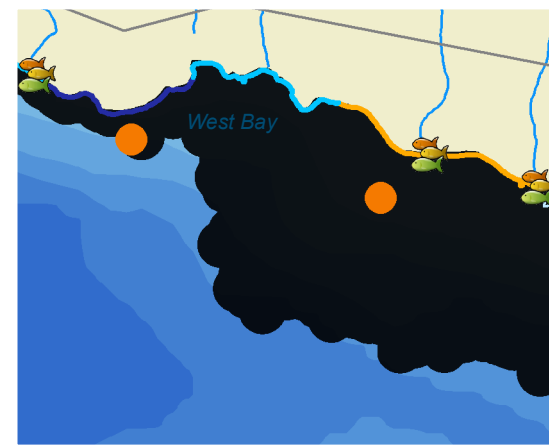
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- Predicted Oil Spill Spread
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**Projection:** BC Albers NAD83

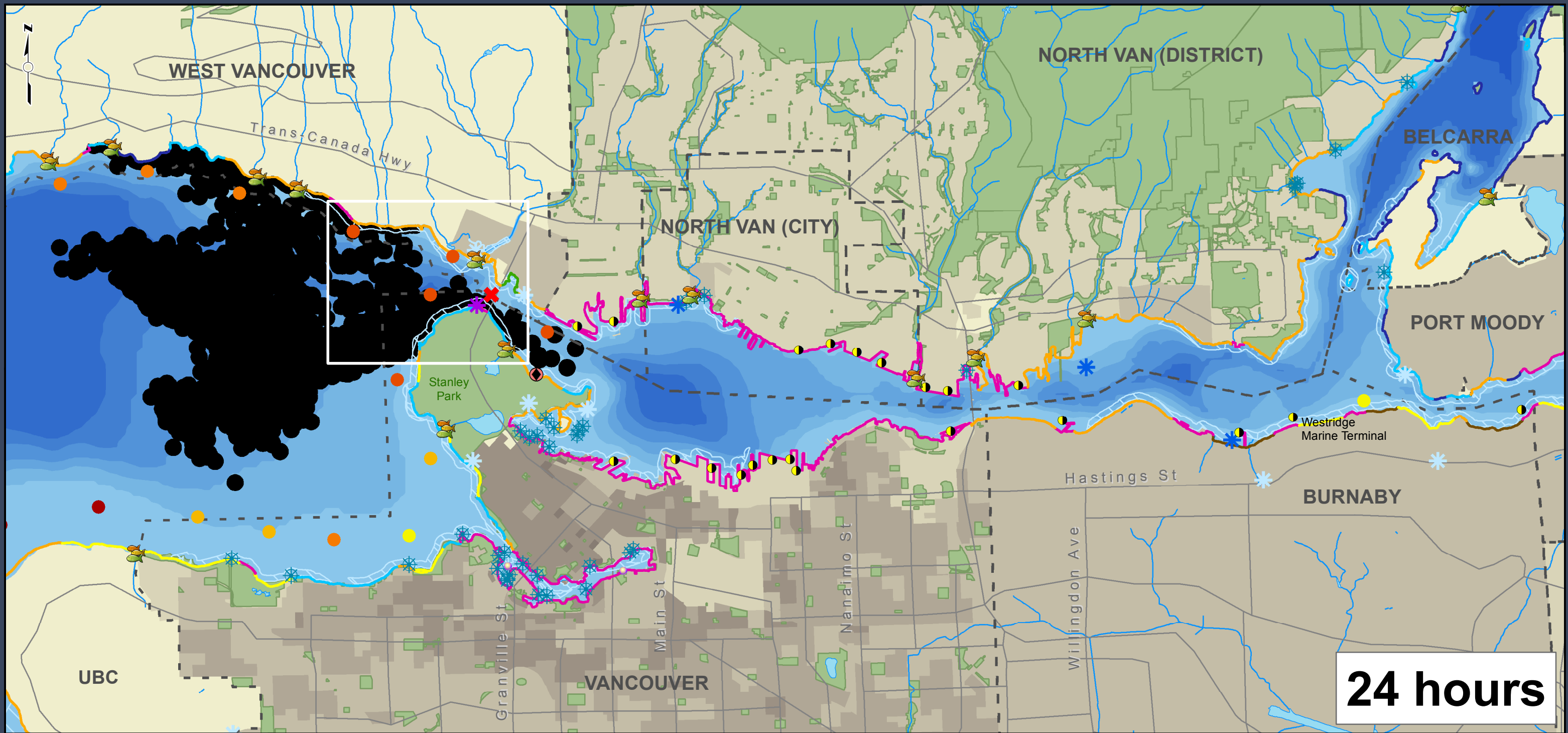
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1:65,000 \*

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**City of Vancouver: Oil Spill Scenario - First Narrows, April 25th, 24 hours**

**Legend**

✖ Spill Origin

■ Predicted Oil Spill Spread

▭ Municipalities

⦿ Aquarium Water Intake

⚓ Marinas

● Port Metro Vancouver Terminals

Population Density (ppl/sq km)

< 500	5,000 - 10,000
500 - 1,000	10,000 - 50,000
1,000 - 5,000	> 50,000

Spring Scoter Sightings

Low High

✳ Cormorant Colonies

⚡ Osprey Nests

Great Blue Herons \*

⚡ Historic Nest Sites

□ Foraging Areas

🌿 Salmon Stream Mouths

● Herring Spawn Activity

Shoreline Types

— Estuary, marsh

— Gravel and sand beach, flat

— Man made

— Mud flat

■ Parks and Protected Areas

Data missing for: Belcarra, Burnaby, Port Moody, UBC, West Vancouver.

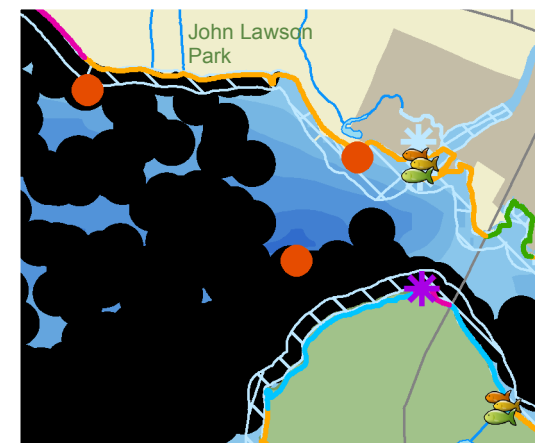
— Rock

— Rock with gravel, sand

— Sand beach, flat

\* Data from 2008. Newer nests/colonies not shown.

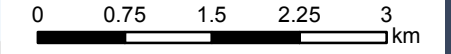
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**24 hours**

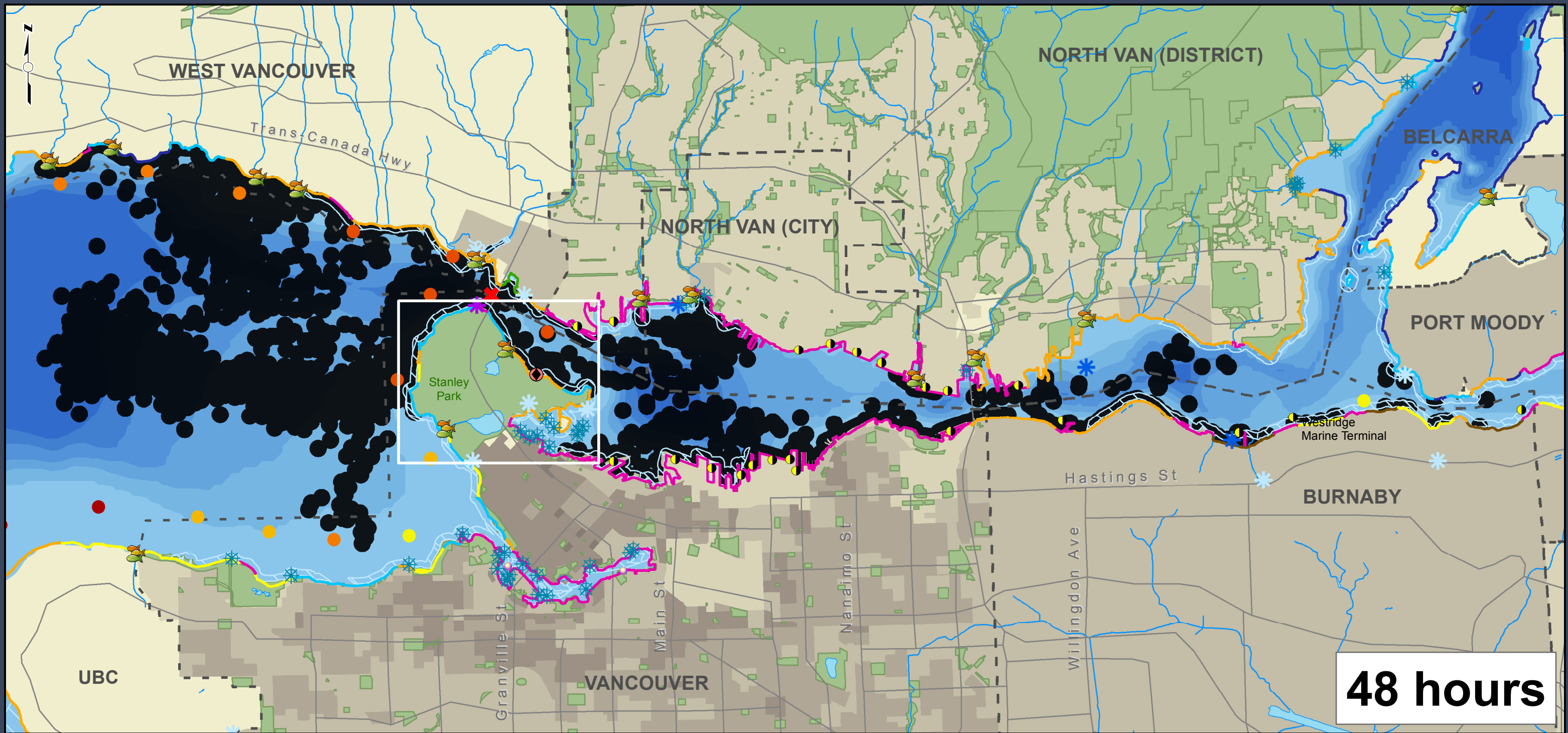
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1:65,000 \*  
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**City of Vancouver: Oil Spill Scenario - First Narrows, April 25th, 48 hours**

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- ▭ Municipalities
- ⦿ Aquarium Water Intake
- ⚓ Marinas
- Port Metro Vancouver Terminals
- Population Density (ppl/sq km)
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  - 500 - 1,000
  - 1,000 - 5,000
  - 5,000 - 10,000
  - 10,000 - 50,000
  - > 50,000
- Spring Scoter Sightings
  - Low
  - High
- ✳ Cormorant Colonies
- ✳ Osprey Nests
- ✳ Great Blue Herons \*
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- Shoreline Types
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  - Parks and Protected Areas
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  - Sand beach, flat

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The entire coastline of Stanley Park, an Important Bird Area (IBA), is exposed to oil, risking thousands of birds. The seawater intake for the Vancouver Aquarium could be contaminated with submerged bitumen.

**48 hours**

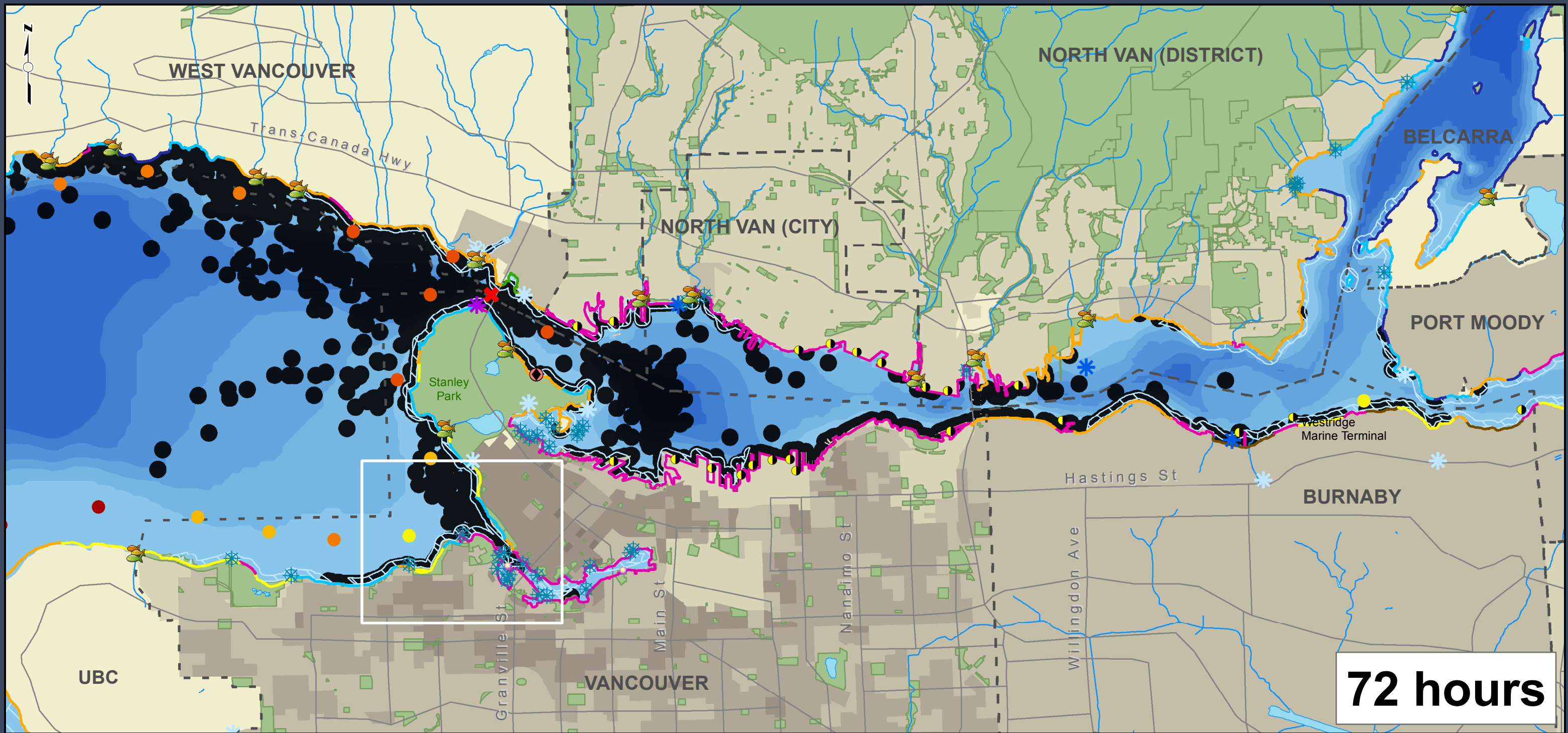
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**72 hours**

**City of Vancouver: Oil Spill Scenario - First Narrows, April 25th, 72 hours**

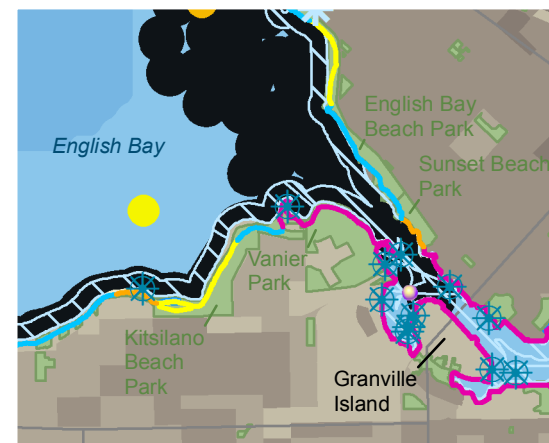
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