Live chart compilation and quality control using BASE EDITOR

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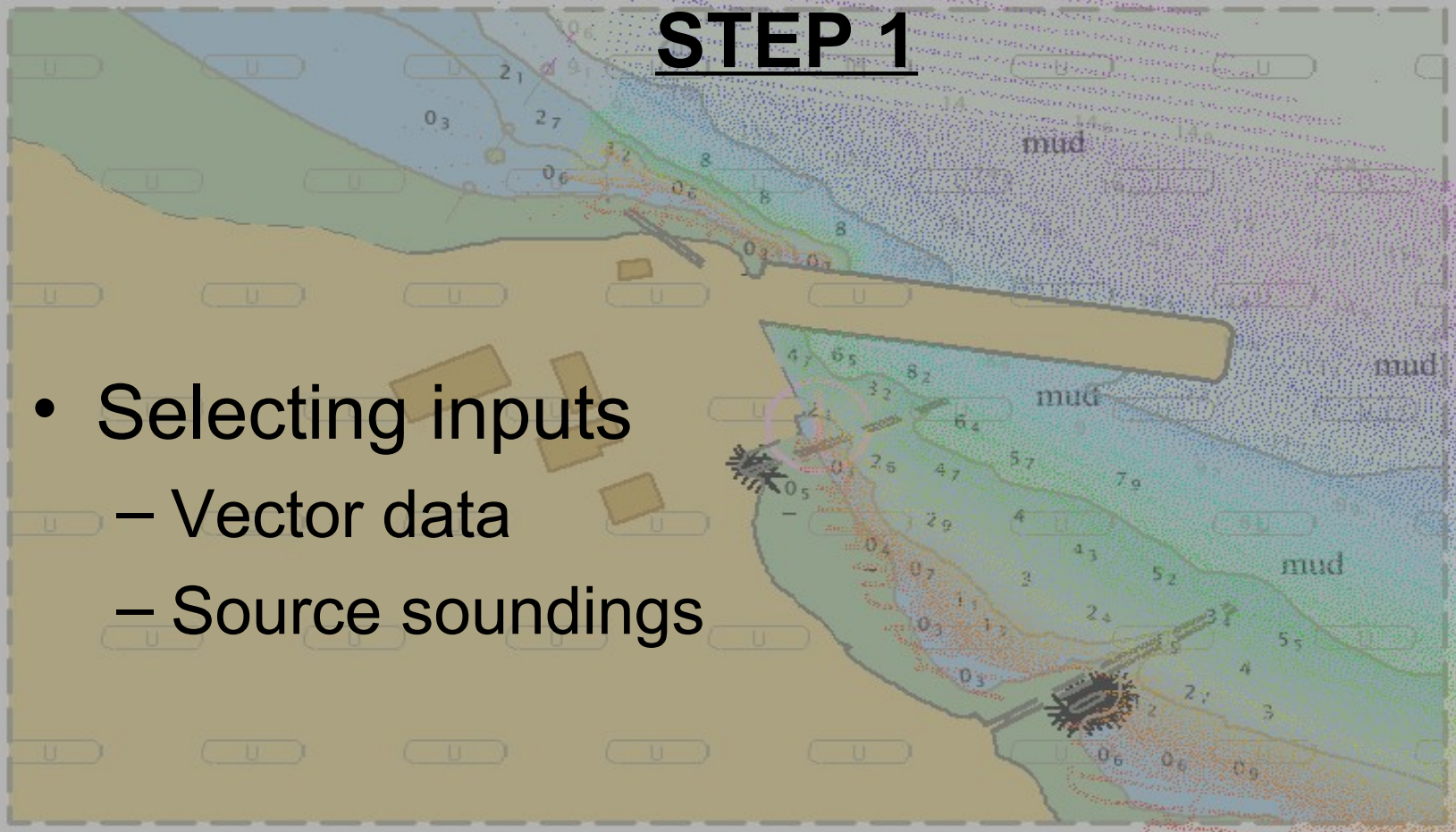
Chart Compilation

- Old hydrographic problem.
- Even with modern tools, chart compilation implies manual work.
- New technology can help us.
- Automatic compilation, impossible.
- Using technology we can improve compilation time and quality control.

STEP 1



- Selecting inputs
  - Vector data
  - Source soundings

STEP 2

- Grabbing the coverage
- Grabbing islands and updating coverage

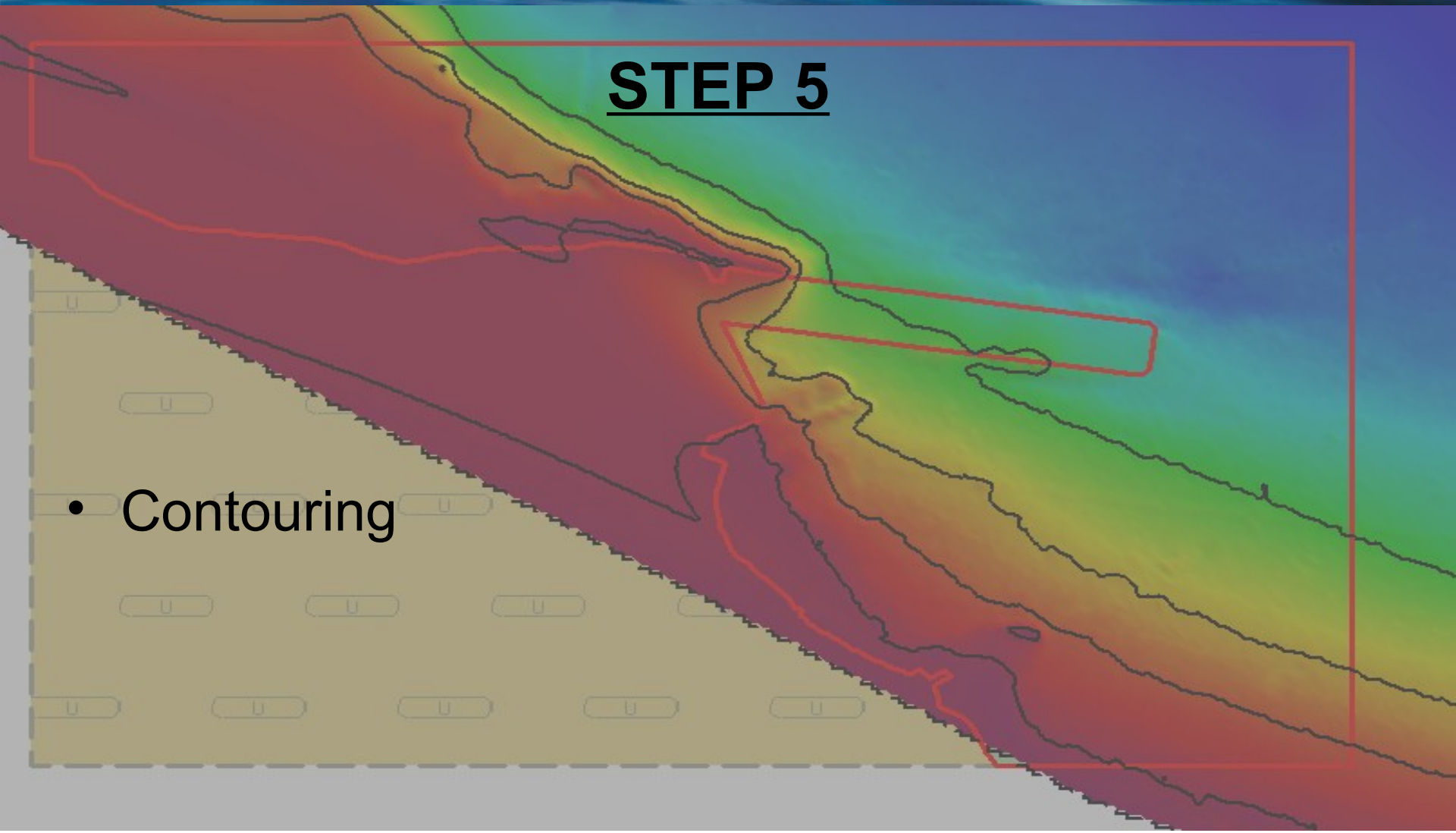
STEP 3

- Creating TIN
- Updating TIN with vector data

STEP 4

- Source Surface
  - Resolution issues
- Product Surface
  - Resolution function of the scale of the chart to produce

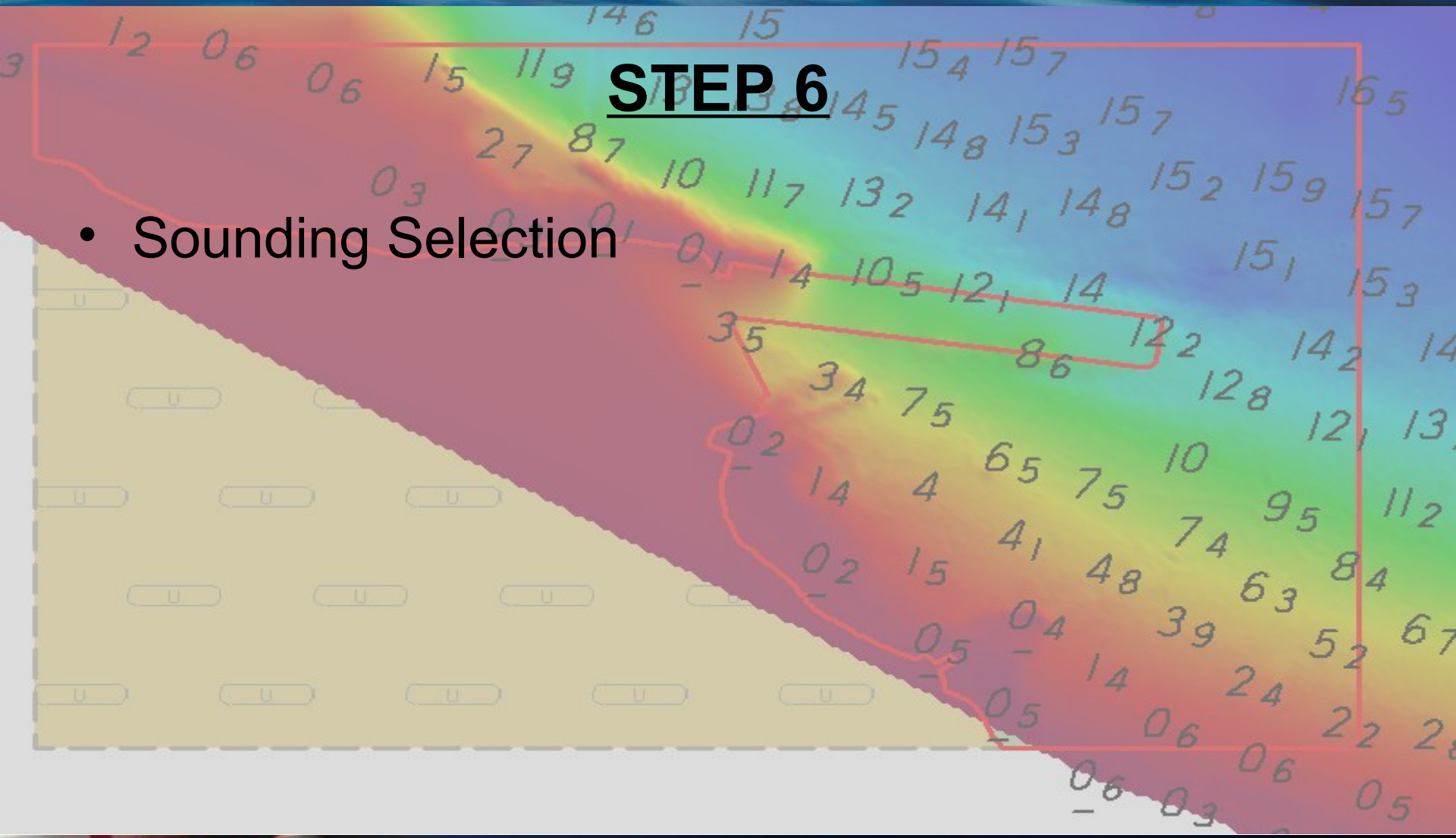
STEP 5



- Contouring

STEP 6

- Sounding Selection



STEP 7

- Extracting features using the coverage

STEP 8

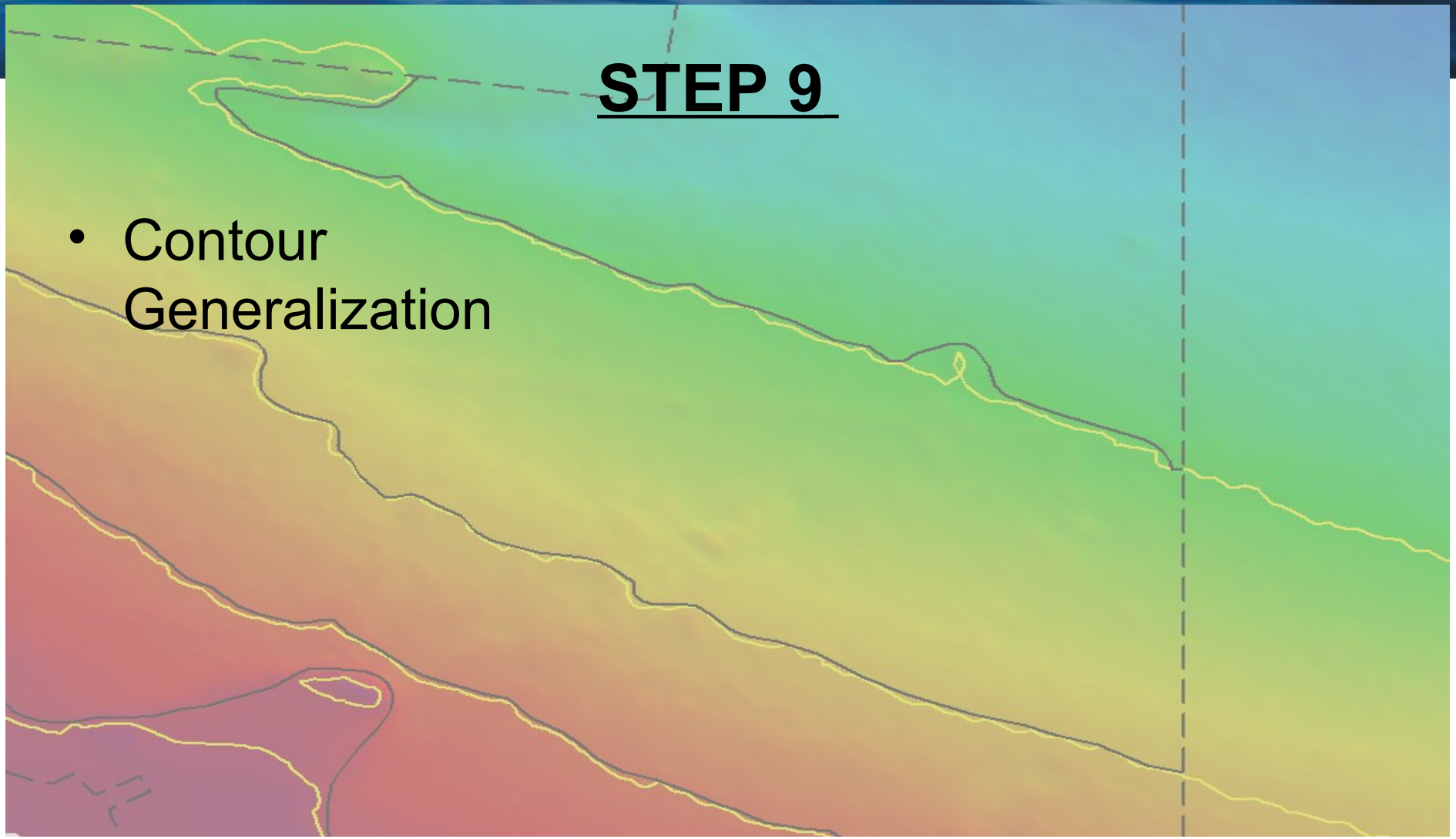
- Removing small contours
- Filtering contours

Selection

Featu...	Acron...	Name	Geom...	Latitude	Longi...	Depth	Objec...	Maste...	Collec...	Area	Length
CA 00...	DEPC...	Depth...	Line				Geogr...			N/A	5.64
CA 00...	DEPC...	Depth...	Line				Geogr...			N/A	5.96
CA 00...	DEPC...	Depth...	Line				Geogr...			N/A	6.23
CA 00...	DEPC...	Depth...	Line				Geogr...			N/A	6.34
CA 00...	DEPC...	Depth...	Line				Geogr...			N/A	6.92
CA 00...	DEPC...	Depth...	Line				Geogr...			N/A	7.00
CA 00...	DEPC...	Depth...	Line				Geogr...			N/A	7.89
CA 00...	DEPC...	Depth...	Line				Geogr...			N/A	10.34
CA 00...	DEPC...	Depth...	Line				Geogr...			N/A	13.04

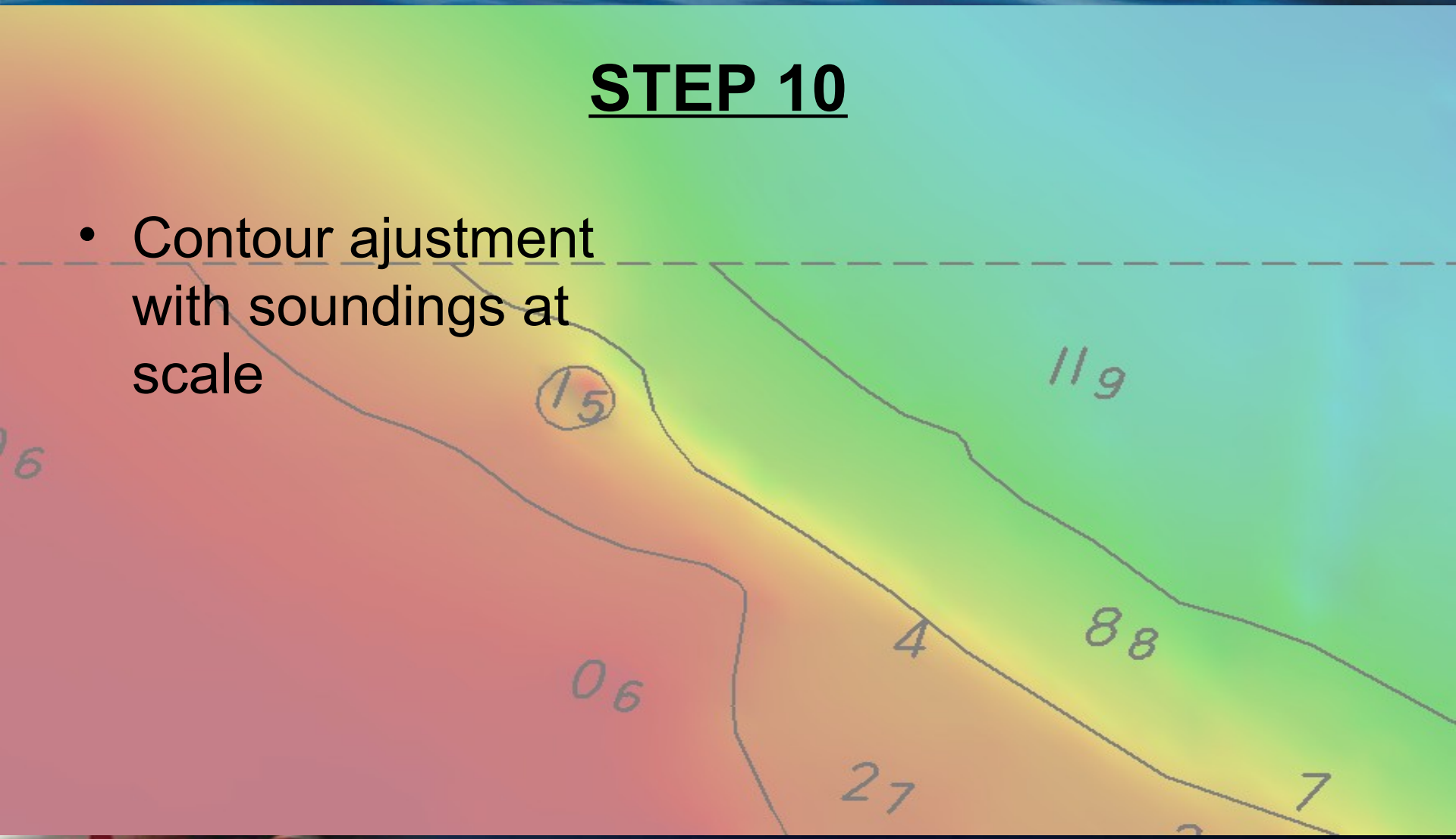
STEP 9

- Contour Generalization

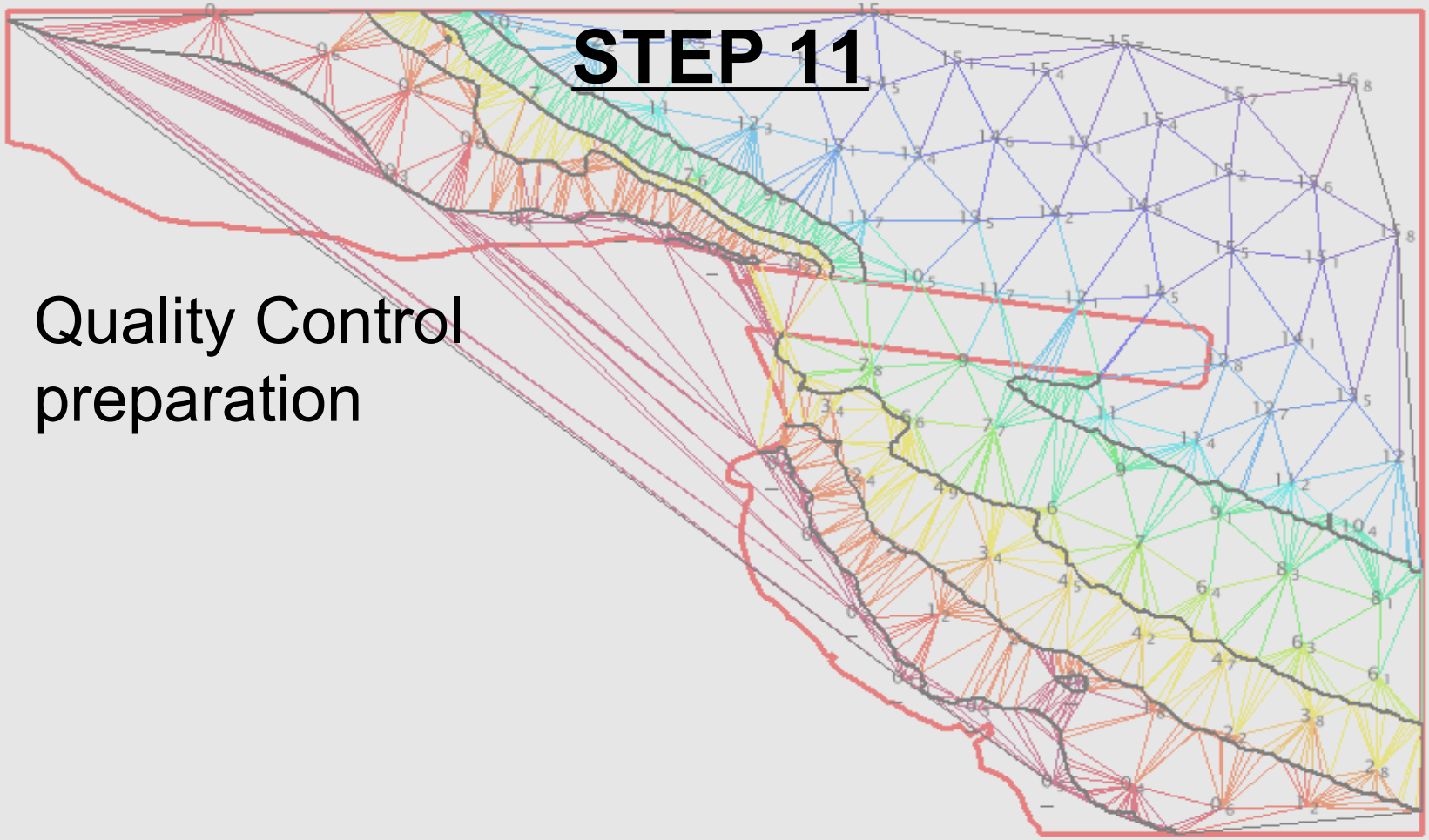


STEP 10

- Contour ajustment with soundings at scale



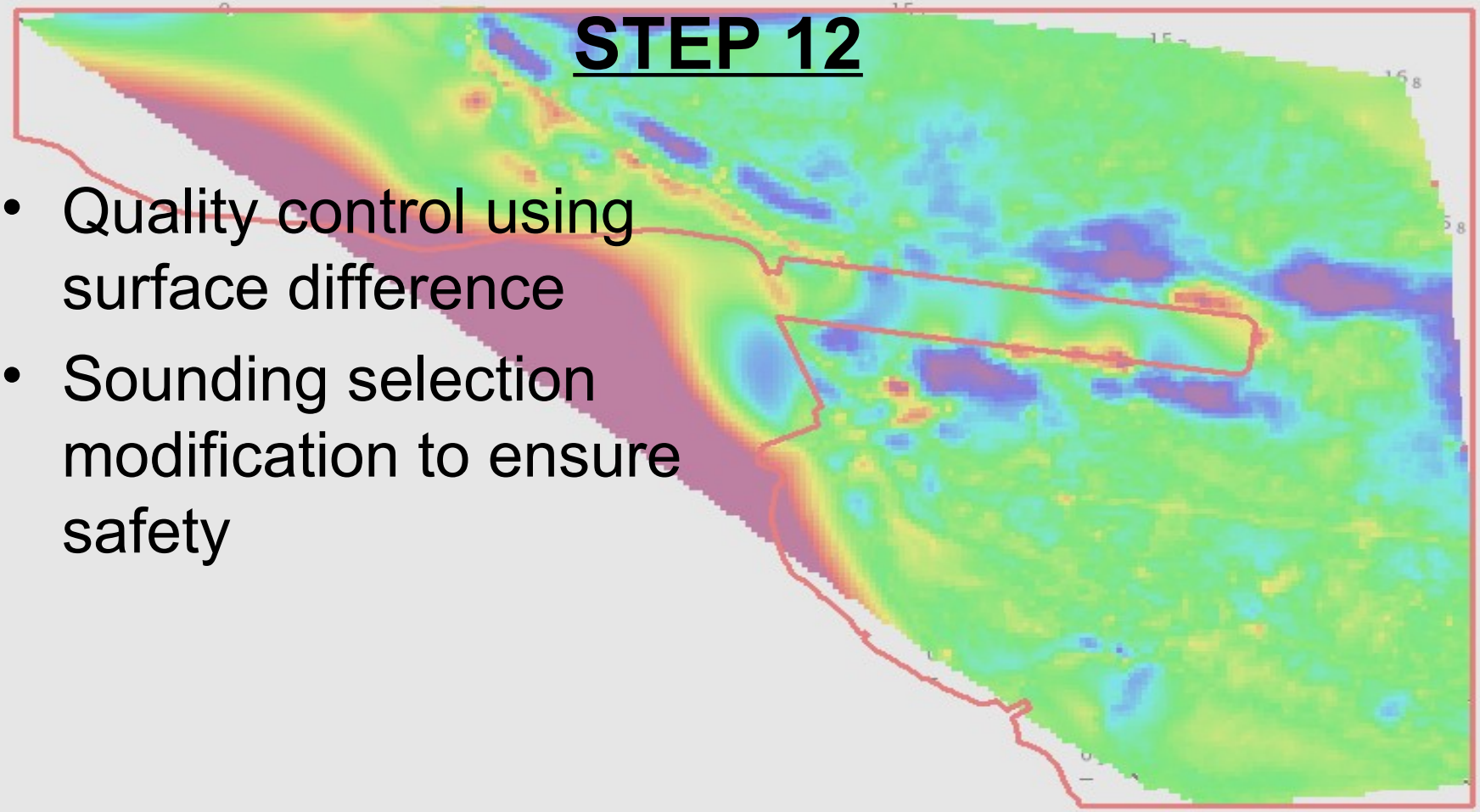
STEP 11



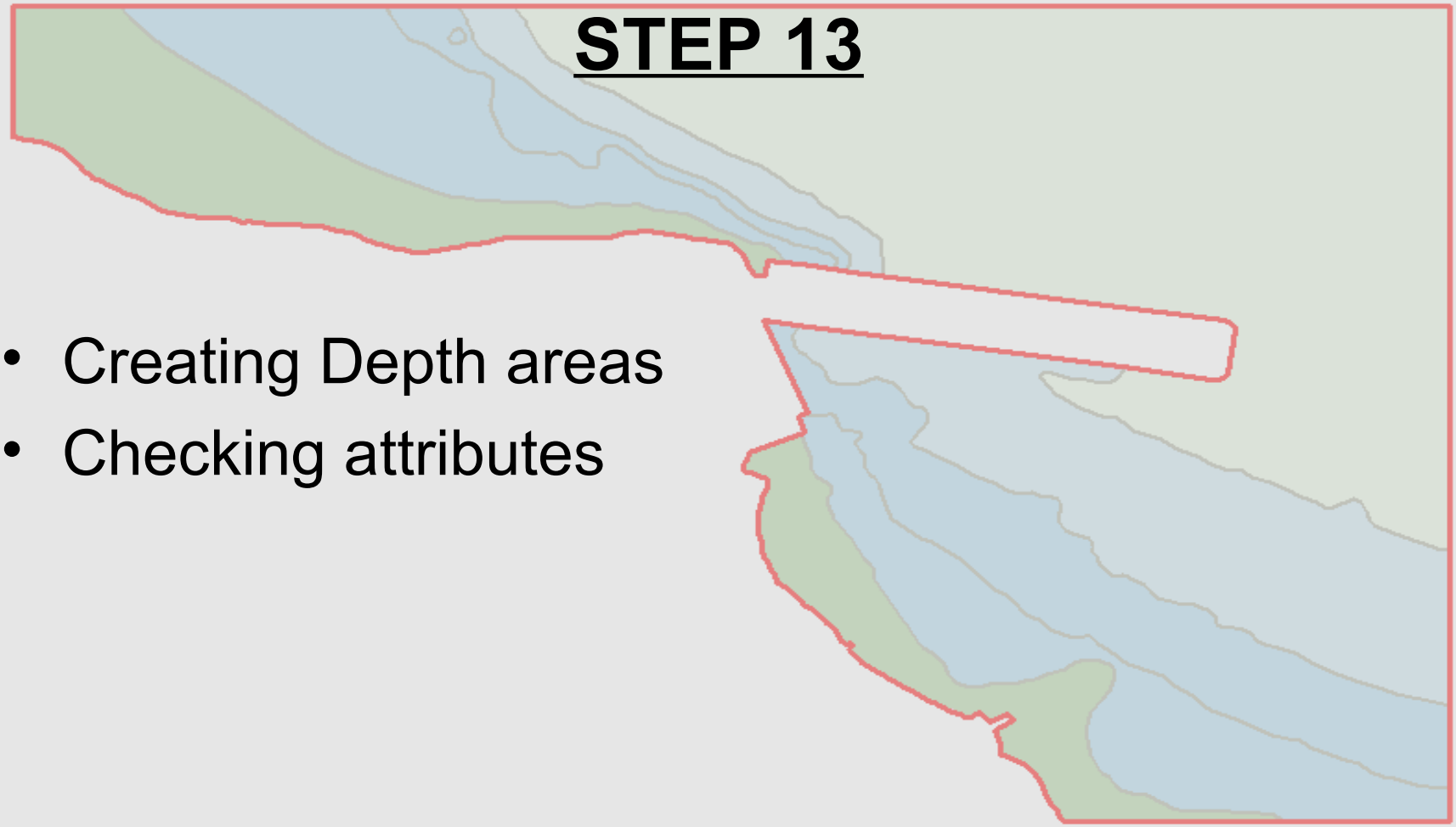
- Quality Control preparation

STEP 12

- Quality control using surface difference
- Sounding selection modification to ensure safety

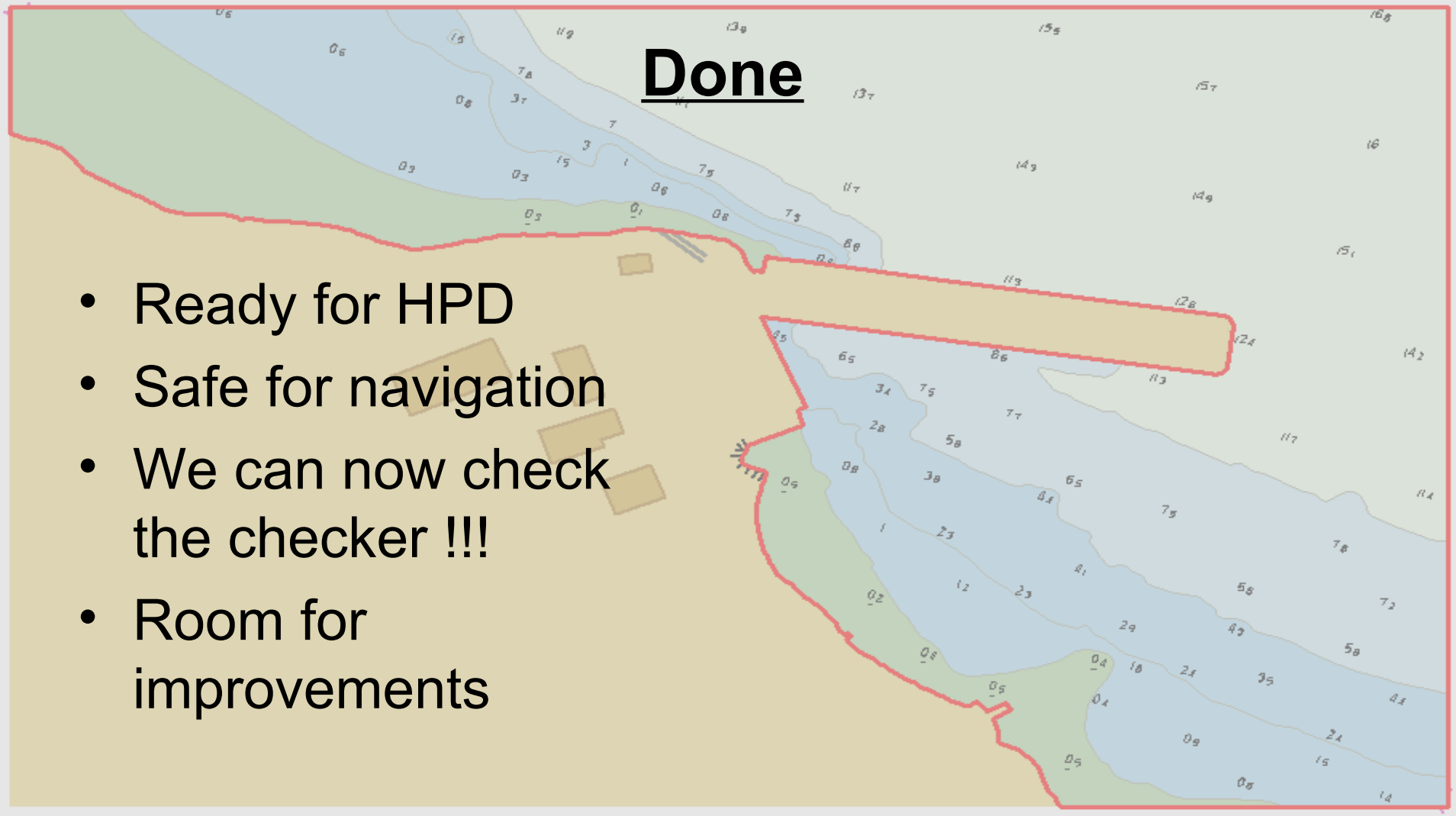


STEP 13

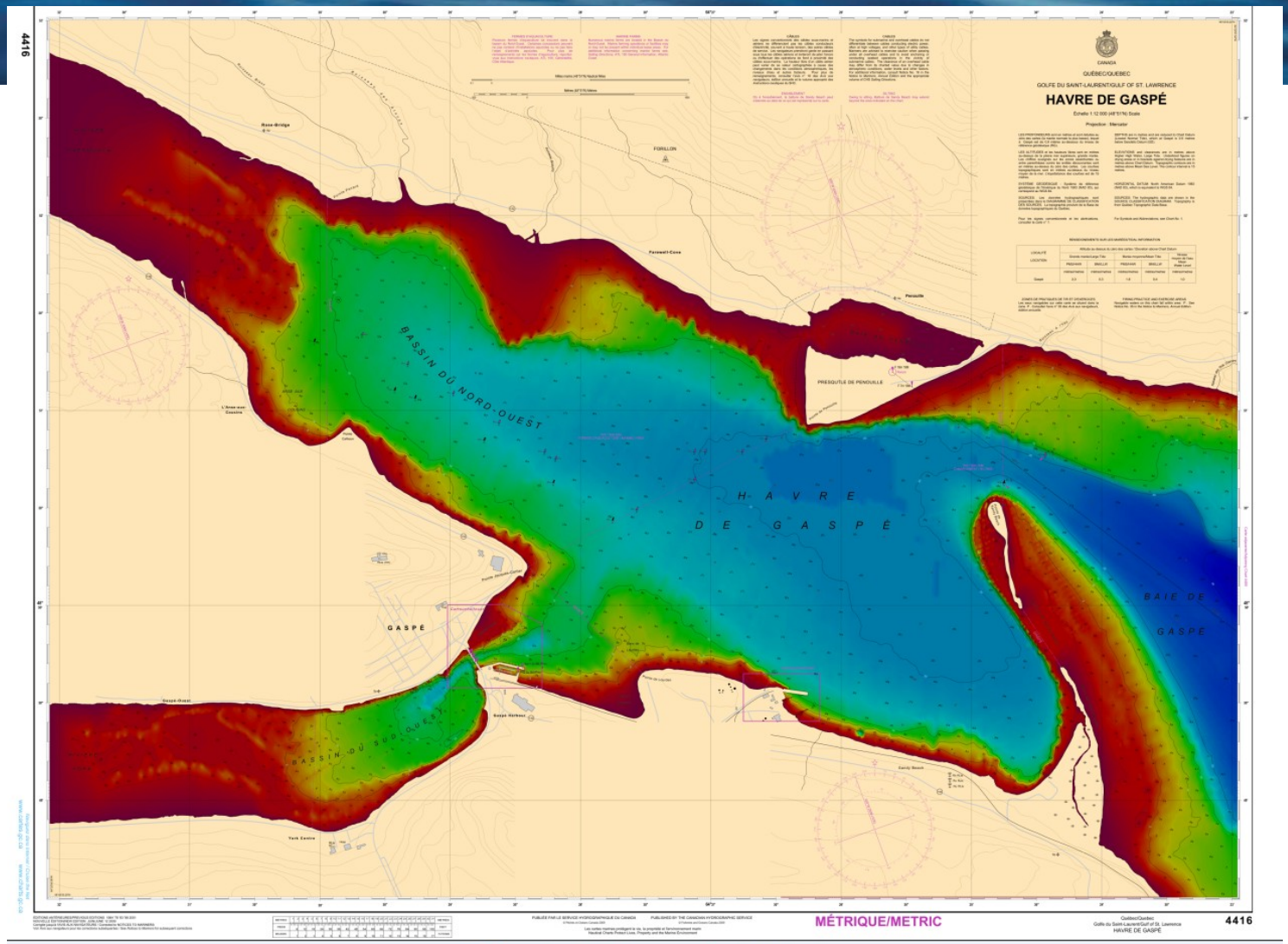


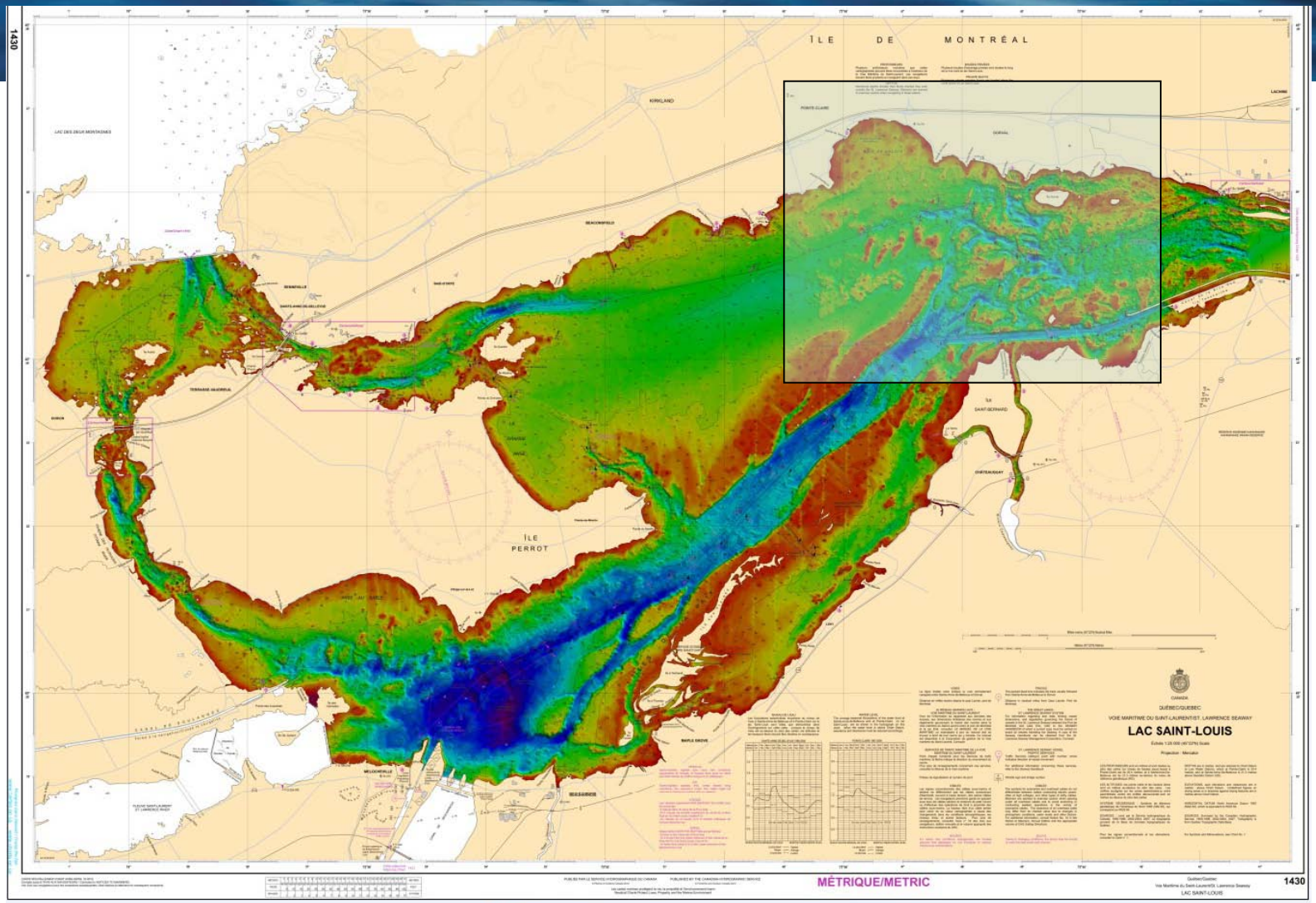
- Creating Depth areas
- Checking attributes

Done

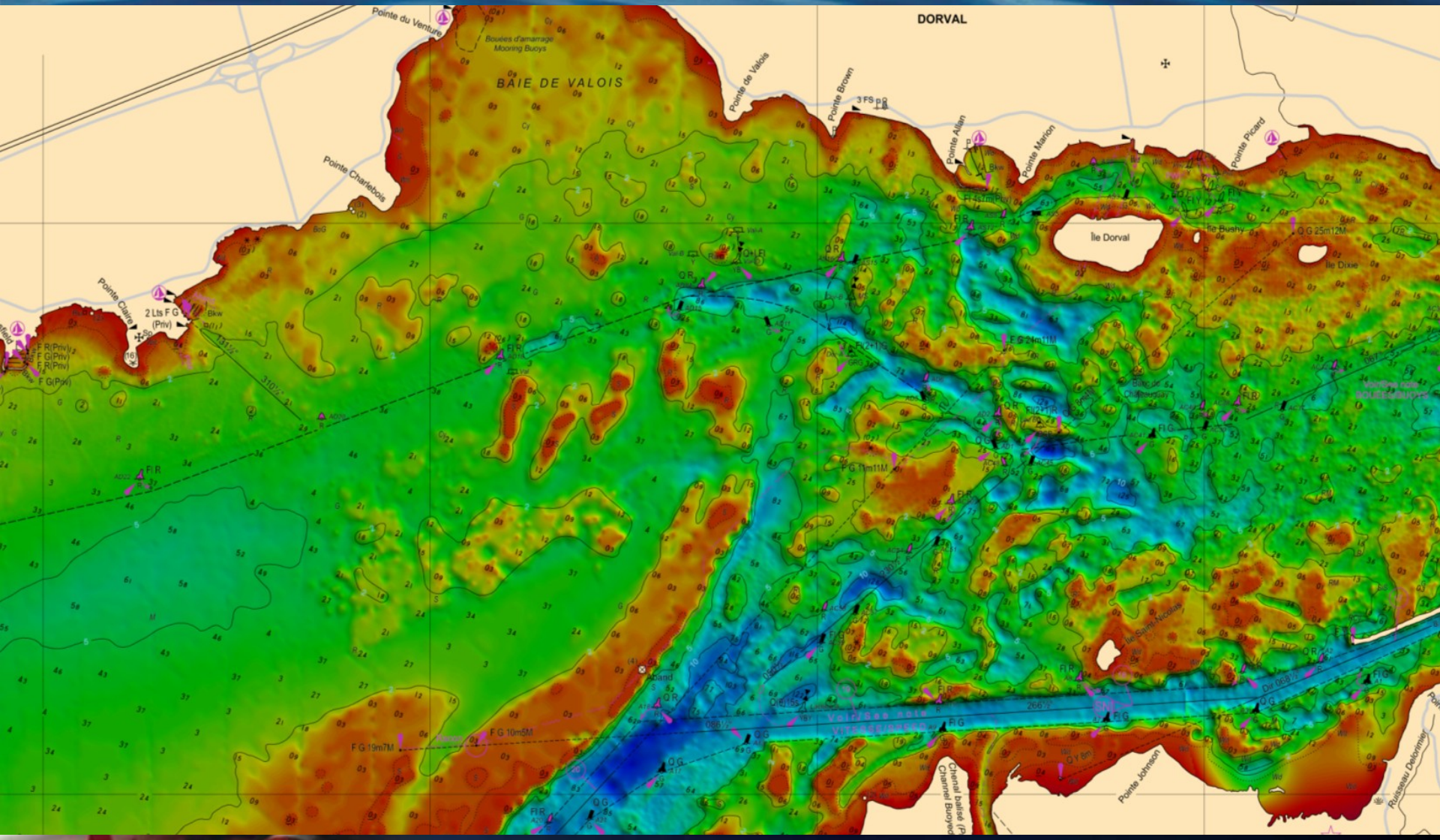


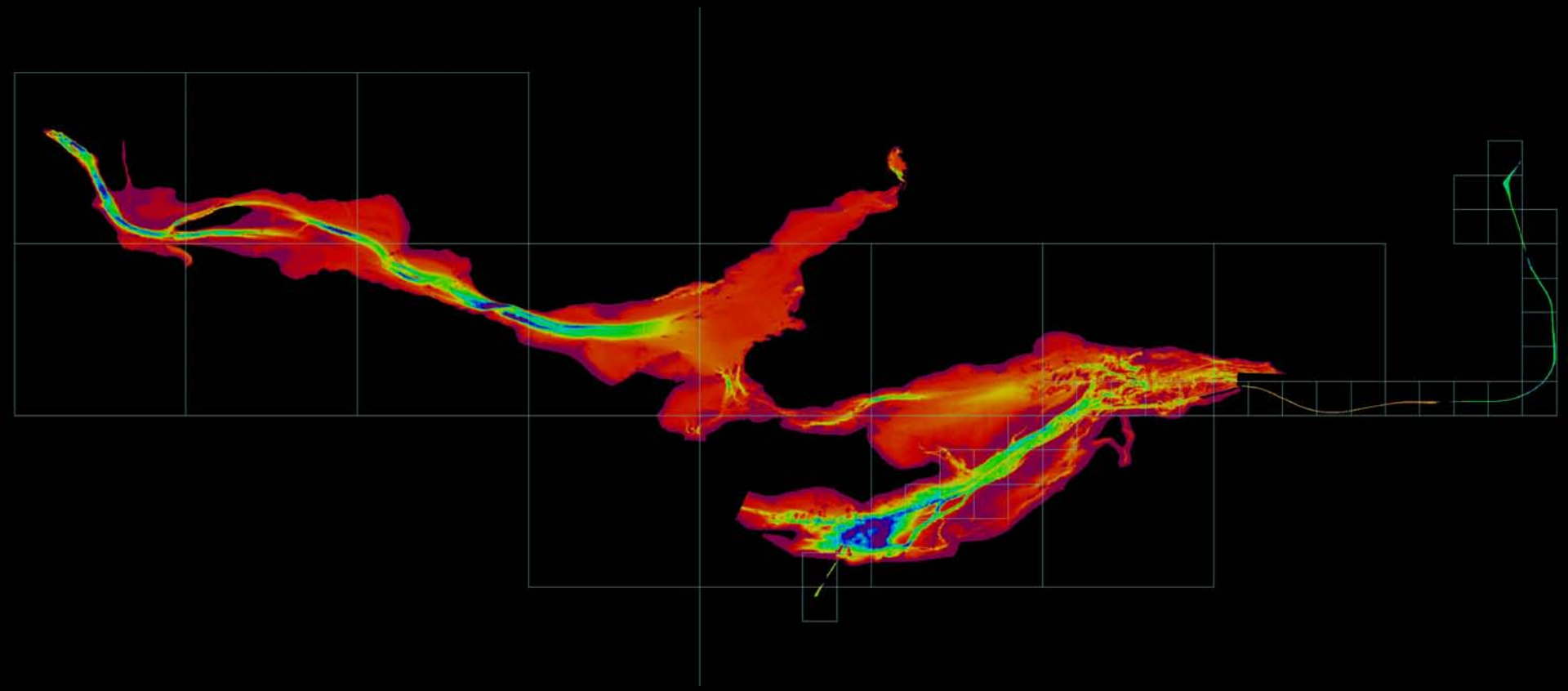
- Ready for HPD
- Safe for navigation
- We can now check the checker !!!
- Room for improvements


4416
CANADA
QUÉBEC/QUEBEC
GOLFE DU SAINT-LAURENT/GULF OF ST. LAWRENCE
HAVRE DE GASPÉ
Échelle 1:12 000 (48°51'N) Scale
Projection - Mercator
Rose-Bridge
FORILLON
Farewell Cove
Penouille
PRESQU'ÎLE DE PENOUILLE
BASSIN DU NORD-OUEST
H A V R E
D E G A S P É
BAIE DE
GASPE
GASPÉ
Gaspé Harbour
BASSIN DU SUD-OUEST
Sandy Beach
York Centre
MÉTRIQUE/METRIC
4416
Québec/Québec
Golfe du Saint-Laurent/Gulf of St. Lawrence
HAVRE DE GASPÉ


1430
ÎLE DE MONTRÉAL
ÎLE PERROT
LAC DES DEUX MONTAGNES
KIRKLAND
BEACONSFIELD
SENNEVILLE
SAINTE-ANNE-DE-BELLEVUE
TERRASSE-MAGISTRAL
DORVAL
LACHINE
POINTE-CLAIRE
L'ÎLE-SAINT-BERNARD
CHÂTEAUGUAY
BAIE DU FEBVRE
MAPLE GROVE
MELOCHEVILLE
BEAUHARNOIS
CANADA
QUÉBEC/QUEBEC
VOIE MARITIME DU SAINT-LAURENT ET LAWRENCE SEAWAY
LAC SAINT-LOUIS
Échelle 1:25 000 (40°32'N) Scale
Projection - Mercator
MÉTRIQUE/METRIC
1430
Québec/Quebec
Voie Maritime du Saint-Laurent/St. Lawrence Seaway
LAC SAINT-LOUIS

Pêches et Océans Canada | Fisheries and Oceans Canada



Canada

The future…S-102