

### COASTAL SEA WATER SITUATION

In September 2017 a monitoring cruise was carried out to implement European Directive 2000/60 / EC.

The monitoring cruise was performed on September 6, 8, 14, 21 e 22 all along the Veneto coast. The table below shows average surface data of the main parameters measured by multiparameter probe.

|                        | Area A | Area B | Area C | Area D |
|------------------------|--------|--------|--------|--------|
| Temperature (°C)       | 22.51  | 23.33  | 21.96  | 21.61  |
| Salinity (PSU)         | 33.59  | 34.82  | 29.20  | 32.67  |
| O <sub>2</sub> (%)     | 98.53  | 102.92 | 107.34 | 97.29  |
| pH                     | 8.28   | 8.25   | 8.36   | 8.29   |
| Turbidity (FTU)        | 3.57   | 4.84   | 3.99   | 2.44   |
| Chlorophyll "a" (µg/l) | 3.61   | 3.16   | 4.78   | 2.74   |

The water chemical-physical parameters are within the standard range.

Surface mucilaginous aggregates were not detected.

Underwater camera observations revealed the presence of "marine snow" along the water column on offshore station.

See the agency's website for further information on the tools used during the monitoring process:

[www.arpa.veneto.it/temi-ambientali/acqua/acque-marino-costiere](http://www.arpa.veneto.it/temi-ambientali/acqua/acque-marino-costiere)



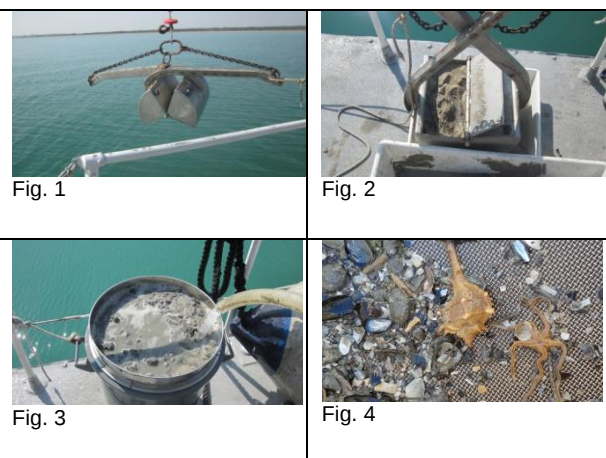
### Curiosity

During this monitoring cruise, sediment sampling was carried out for analyzes of mobile benthic communities, ie species living in close contact with marine sediment, such as worms, crustaceans and other invertebrates. The study of these species is a useful tool for marine waters quality evaluation because can provide more complete and long-term information on the overall conditions of the marine ecosystem.

For this activity, a sediment sample is taken using a Van Veen Grab Sampler (Fig.1-2) and then sieved (Fig. 3) to recover the organisms living inside by means of a sieve having a vacuum mesh that can hold individuals larger than 200µm (Fig.4).

The obtained sample is appropriately treated to prevent organisms decomposing and subsequently analyzed by the microscope to determine the number and abundance of each species.

The data is inserted into a software that processes them to determine an index, the M-AMBI Index, that can sum up the complexity of benthos communities, allowing a ecological status assessment.



(source: ARPAV)

### Coastal Bathing Water Situation

For the year 2017, in the regional monitoring network for the quality of coastal bathing water, there are 95 control points in the Adriatic Sea and 1 on the stretch of water near Albarella.

Each month from May to September, the following activities are carried out at every checkpoint: measurement of environmental parameters, visual inspections and water sampling for bacteriological analysis. Inspections are carried out by ARPAV's technicians, with the support of the nautical units of the Veneto Region Coast Guard and Harbour Offices. The situation at **September 15**, ending of bathing season, is shown in the adjacent table.

**Algae Surveillance:** no potentially toxic algal blooms were detected.

For further information, please visit the website at:

<http://www.arpa.veneto.it/temi-ambientali/acqua/datiacqua/balneazione.php>

| Situation 2017, September 15         |  |  |  |
|--------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Mare Adriatico</b>                | <b>95</b>                                                                             | -                                                                                     | -                                                                                     |
| S. Michele al Tagliamento (Ve)       | 6                                                                                     | -                                                                                     | -                                                                                     |
| Caorle (Ve)                          | 15                                                                                    | -                                                                                     | -                                                                                     |
| Eraclea (Ve)                         | 2                                                                                     | -                                                                                     | -                                                                                     |
| Jesolo (Ve)                          | 12                                                                                    | -                                                                                     | -                                                                                     |
| Cavallino Treporti (Ve)              | 12                                                                                    | -                                                                                     | -                                                                                     |
| Venezia                              | 18                                                                                    | -                                                                                     | -                                                                                     |
| Chioggia (Ve)                        | 11                                                                                    | -                                                                                     | -                                                                                     |
| Rosolina (Ro)                        | 9                                                                                     | -                                                                                     | -                                                                                     |
| Porto Viro (Ro)                      | 2                                                                                     | -                                                                                     | -                                                                                     |
| Porto Tolle (Ro)                     | 8                                                                                     | -                                                                                     | -                                                                                     |
| <b>Specchio Nautico di Albarella</b> | <b>1</b>                                                                              | -                                                                                     | -                                                                                     |
| Rosolina (Ro)                        | 1                                                                                     | -                                                                                     | -                                                                                     |