Interactive comment on “Dataset of Submerged Sand Deposits organised in an interoperable Spatial Data Infrastructure (Western Sardinia, Mediterranean Sea)” by Walter Brambilla et al.

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General comments

The work highlights the results of the research for submerged sandy deposits on the Western Sardinia continental shelf potentially exploitable as a resource for coastal protection strategies and offers some tools to make their management more efficient. Regarding to this it would be important at least to cite, in the introduction, with some bibliographical references, the need to set up studies that evaluate the environmental impact of this type of activity on the seabed and the related marine ecosystem. Without this type of assessment it should not be possible to obtain permits to use the submerged sand resource.

Specific Comments

There are several example of management projects and planning using Submerged Sand Deposits for renourishment of coastal areas but in Italy only Emilia-Romagna Region developed a collaboration with research to build a geodatabase (In_Sand, Correggiari et al. 2012 and 2016, last revised version) with a specific architecture, designed to the exploitation of the sand resource in terms of the sand characteristics, sand useful volumes available and the level of the lower limit of the sand deposit (referred by the authors as Sand Base). Another geodatabase has been implemented (Env_Sand, ref. Grande et al, 2015, result of a joint collaboration of CNR ISMAR and ISPRA in Ritmare Project CNR framework) with a complex architecture to organize all those data that must be collected in the environmental monitoring program before after and during the dredging activities of the Submerged Sand Deposits. (Nicoletti et al 2018; MATTM-Regioni, 2018). Reference* Nicoletti L., La Valle P., Paganelli D., Lattanzi L., La Porta B., Targusi M., Lisi I., Loia M., Maggi C., Pazzini A., Piovetti R., Gabellini M. (2018) - Aspetti ambientali del dragaggio di sabbie relitte a fini di ripascimento: protocollo di monitoraggio per l’area di dragaggio. ISPRA, Manuali e Linee Guida 172/2018, 35 pp. Technical corrections Add those technical corrections to the ones highlighted by RC1: Page 2 line 10 EC Projects: Coscience and Micore should be described like Eurovision Page 2 line 31: better use “Ministry of Environment Land and Sea” as is written in the english version of its italian name. Page 2 line 32: (the updated reference, with “Eurovision, 2004” is: “MATTM – Regioni, 2018”) * the complete ref is a book in italian available on the site: http://www.erosionecostiera.isprambiente.it/files/linee-guida-nazionali/TNEC_LineeGuidaerosionecostiera_2018.pdf *Ref: MATTM-Regioni, 2018. Linee Guida per la Difesa della Costa dai fenomeni di Erosione e dagli effetti dei Cambiamenti climatici. Versione 2018-Documento elaborato dal Tavolo Nazionale sull’Erosione Costiera MATTM-Regioni con il coordinamentotecnico di ISPRA, 305pp Page 3 line 1-3 and line 9-10: Page 3 line 1-3 and line 9-10: I would like to encourage the authors to better highlight the importance of introducing this type of instruments, the ones focused on geological / physical characteristics of the sandy deposit, and the one concerning the environmental data acquired for the management and monitoring
of the exploitation of the submerged marine sand resource. Use the right reference papers for both the types. (in_Sand: Correggiari et al., 2016 and Env_Sand: Grande et al 2015) Page 3 line 9 instead of “marine space” better “maritime space” Page 6 line 2 add Correggiari et al. 2016 Page 6 line 12: better use “Ministry of Environment Land and Sea” as is written in the english version of its italian name. Page 13 line 12 instead of 2015 the ref is 2005 Page 19 Table 1 Could be useful to add square km to the Submerged Sand Deposit features