



Catalogue of MARS database, version 2

**Data available in
"MARS_database_v2.accdb"**

at:

http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/

WP 5.1.1

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Modified tables:

- m_fec_regions
- m_fec_characteristics
- m_hinterland_characteristics
- m_soe_rivers_determinands_2005_2010

New tables:

- m_lakes_tr
- m_lakes_catchments_clc_sel2
- m_lakes_broad_type
- m_estuary_hinterlands_clc
- m_estuaries_hinterland_population
- m_rivers_broad_type
- m_fec_fish_assemblage_type
- m_fec_nitrogen_phosphorous
- m_fec_river_and_lake_broad_type
- m_fec_hymo_maes
- m_fec_hydro_stress_indicators
- m_fish_assemblage_type
- m_grdc_ewa_month_1961_1990
- m_soe_fish_assemblage_type
- m_soe_rivers_biology
- m_wfd_swb_tr

Title	Data on agriculture converted to FEC-s
Name of feature class	m_fec_agriculture
Current version	1.0
Creation / Publication Date / Last Update	30.09.2015
Abstract / Definition	EUROSTAT data on agriculture converted from NUTS regions to FEC-s
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	EUROSTAT: http://ec.europa.eu/eurostat , m_fec
Additional Information, Comments	Agricultural data are presented as density (per square kilometre of FEC). There are data on beehives, cattle, dairy cattle, equidae, farms, farms with livestock, goats, share of total irrigable area, volume of water used for irrigation, maize, other cattle, pigs, other pigs, potatoes, poultry, rabbits, sheep, sows, utilised agricultural area, wheat and vineyards. Data are for year 2010, unless otherwise stated in the 'remarks' field.
Number of records	1647286
List of attributes	m_zhyd, parameter_id, density, remarks, unit_density, stat_level, nuts_id

Title	Characteristics of FEC-s
Name of feature class	m_fec_characteristics
Current version	2.0
Creation / Publication Date / Last Update	7.12.2016
Abstract / Definition	Characteristics of FEC-s: area, meteorological statistics for periods 1950 – 2000, 1961 – 1990 and 2001 - 2010, DEM, slope, population density and count
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_fec, m_altitude, m_slope, m_pp_1950_2000, m_pp1_1950_2000, m_pp7_1950_2000, m_pp_1961_1990, m_pp1_1961_1990, m_pp7_1961_1990, m_t_1950_2000, m_t1_1950_2000, m_t7_1950_2000, m_population_density_gpw, m_population_density_jrc, m_pp_2001_2010_1km2_jrc, m_pp1_2001_2010_1km2_jrc, m_pp7_2001_2010_1km2_jrc, m_t_2001_2010_1km2_jrc, m_t1_2001_2010_1km2_jrc, m_t7_2001_2010_1km2_jrc
Additional Information, Comments	In addition to the first version there are climatological data for period 2001 - 2010. Other data remain unchanged. For original sources please see the documentations of raster and vector parts of the geodatabase.
Number of records	101957
List of attributes	m_zhyd, fec_area_km2, id_raster, f_pod, f_p1_6090, f_p7_6090, f_p1_5000, f_p7_5000, f_p_6090, f_p_5000, f_t1_5000, f_t7_5000, f_t_5000, pod_source, f_pon, f_slope, f_dem_a, f_dem_min, f_dem_max, f_p_0110, f_p1_0110, f_p7_0110, f_t_0110, f_t1_0110, f_t_7_0110

Title	MARS land cover on FEC
Name of feature class	m_fec_clc
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	Absolute area of each MARS land cover category per FEC
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_land_cover
Additional Information, Comments	For original source please see the documentation of vector part of geodatabase.
Number of records	101957
List of attributes	m_zhyd, area_km2, urban_fabric, industrial_commercial_and_transport_units, mine_dump_and_construction_sites, artificial_non_agricultural_vegetated_areas, arable_land, permanent_crops, pastures, heterogeneous_agricultural_areas, forests, scrub_and_or_herbaceous_vegetation_associations, open_space, inland_wetlands, maritime_wetlands, inland_wetlands, marine_waters

Title	Nitrogen and phosphorous per km² of FEC
Name of feature class	m_fec_nitrogen_phosphorous
Current version	1.0
Creation / Publication Date / Last Update	7.12.2016
Abstract / Definition	Nitrogen and phosphorous in tonne per year per km ² of FEC from different sources
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	E-PRTR: http://www.eea.europa.eu/data-and-maps/data/member-states-reporting-art-7-under-the-european-pollutant-release-and-transfer-register-e-prtr-regulation-12 , EUROSTAT: http://ec.europa.eu/eurostat/cache/metadata/DE/aei_pr_gnb_esms.htm , UWWTD: http://www.eea.europa.eu/data-and-maps/data/waterbase-uwwtd-urban-waste-water-treatment-directive-4#tab-interactive-maps-produced
Additional Information, Comments	
Number of records	101957
List of attributes	m_zhyd, area_km2, eprtr_n_ty_per_km2, eprtr_p_ty_per_km2, eurostat_n_ty_per_km2, eurostat_p_ty_per_km2, uwwtd_n_ty_per_km2, uwwtd_p_ty_per_km2

Title	Different regions assigned to each FEC
Name of feature class	m_fec_regions
Current version	2.0
Creation / Publication Date / Last Update	7.7.2016
Abstract / Definition	Each FEC has assigned code and name of biogeographical region, ecoregion, hydroecoregion, CCM2 WSO6 polygon, broad hydroregion, WWF ecoregion and WWF freshwater ecoregion of the world in which it lies.
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_fec, m_biogeoregions, m_ecoregions, m_hydroecoregions, m_fec_wso6, m_broad_hydroregions, m_wwf_teow, w_wwf_feow_hydrosheds
Additional Information, Comments	To each FEC only one code and name of each region classification is assigned. At boundary between two regions, the region, in which FEC centre falls is assigned to FEC. Some additional regions are assigned in comparison to the first version: MARS broad hydroregions, WWF terrestrial ecoregions of the world, WWF freshwater ecoregion of the world. For original sources please see the documentation of the vector part of geodatabase.
Number of records	101957
List of attributes	m_zhyd, area_km2, biogeo_name, biogeo_abbre, eco_area_id, eco_name, her_code, her_first_name, m_wso6id, f_eco_r, f_bio_r, bh_name, bh_abbre, bh_sub_name, bh_sub_abbre, wwf_eco_name, wwf_eco_id, feow_id, feow_name

Title	Hinterlands (drainage areas) of FEC-s
Name of feature class	m_fec_hinterlands
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	FEC-s listed to all hinterlands they belong to and its share in hinterland, needed for converting parameters from FEC-s to their hinterlands
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_fec
Additional Information, Comments	
Number of records	4768391
List of attributes	id, m_zhyd, m_hinterland, fec_area_km2, hinterland_share

Title	Aggregated hinterlands (drainage areas) of FEC-s
Name of feature class	m_fec_hinterlands_aggregated
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	Aggregated hinterlands (drainage areas) of FEC-s
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_fec
Additional Information, Comments	Hinterland ID 'm_hinterland' is the same as FEC ID 'm_zhyd' of corresponding FEC.
Number of records	101957
List of attributes	m_hinterland, fec_num, hinterland_area_km2

Title	Data on agriculture converted to hinterlands
Name of feature class	m_hinterland_agriculture
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	EUROSTAT: http://ec.europa.eu/eurostat , m_fec_agriculture, m_fec_hinterlands
Additional Information, Comments	Agricultural data are presented as density (per square kilometre of hinterlands). They are calculated from agricultural data converted to FEC. There are data on beehives, cattle, dairy cattle, equidae, farms, farms with livestock, goats, share of total irrigable area, volume of water used for irrigation, maize, other cattle, pigs, other pigs, potatoes, poultry, rabbits, sheep, sows, utilised agricultural area, wheat and vineyards. Data are for year 2010, unless otherwise stated in the 'remarks' field.
Number of records	1672131
List of attributes	m_hinterland, hinterland_area_km2, fec_count, density, parameter_id, unit_density

Title	Characteristics of hinterlands
Name of feature class	m_hinterland_characteristics
Current version	2.0
Creation / Publication Date / Last Update	7.12.2016
Abstract / Definition	Characteristics of hinterlands: meteorological statistics, DEM, slope, population density and count
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_fec_characteristics, m_fec_hinterlands
Additional Information, Comments	In addition to the first version there are precipitation and temperature data for period 2001 – 2010. Other data remain unchanged.
Number of records	101957
List of attributes	m_hinterland, h_pon, h_pod, h_pod_source, h_p1_6090, h_p7_6090, h_p_6090, h_p1_5000, h_p7_5000, h_p_5000, h_t1_5000, h_t7_5000, h_t_5000, h_p_0110, h_p1_0110, h_p7_0110, h_t_0110, h_t1_0110, h_t7_0110, h_dem_min, h_dem_max, h_slope

Title	MARS land cover on hinterlands
Name of feature class	m_hinterlands_clc
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	Absolute area of each MARS land cover category per hinterland
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_fec_clc, m_fec_hinterlands
Additional Information, Comments	
Number of records	101957
List of attributes	m_hinterland, m_hinterland_area_km2, fec_count, urban_fabric, industrial_commercial_and_transport_units, mine_dump_and_construction_sites, artificial_non_agricultural_vegetated_areas, arable_land, permanent_crops, pastures, heterogeneous_agricultural_areas, forests, scrub_and_or_herbaceous_vegetation_associations, open_space, inland_wetlands, maritime_wetlands, inland_wetlands, marine_waters

Title	Data on agriculture per NUTS regions
Name of feature class	m_nuts_agriculture
Current version	1.0
Status	
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	Statistical data on agriculture per NUTS regions
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	EUROSTAT: http://ec.europa.eu/eurostat
Additional Information, Comments	There are data on beehives, cattle, dairy cattle, equidae, farms, farms with livestock, goats, share of total irrigable area, volume of water used for irrigation, maize, other cattle, pigs, other pigs, potatoes, poultry, rabbits, sheep, sows, utilised agricultural area, wheat and vineyards. Data are for year 2010, unless otherwise stated in the 'comment' field.
Number of records	5437
List of attributes	cc, nuts_id, nuts_label, stat_level, parameter_id, y2010, unit, comment, y2010_density, nuts_area_km2, es_code

Title	WISE SoE rivers quality stations determinants
Name of feature class	m_soe_rivers_determinands_2005_2010
Current version	2.0
Creation / Publication Date / Last Update	7.12.2016
Abstract / Definition	Determinants of WISE SoE rivers quality stations for year 2010 and for period 2005 - 2010
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	WISE SoE database
Additional Information, Comments	There are some additional attributes in comparison to the 1 st version and more WISE SoE river stations are included. The table was named "m_soe_rivers_nutrients" in the 1 st version. Data without suffix "_avg" are for year 2010, data with suffix "_avg" are average for period 2005 – 2010.
Number of records	16694
List of attributes	cc, s_waterbas, tr, m_zhyd, maindrain, strahler, m_hack_order, s_river_name, s_altitude, s_m_altitude, s_catchment, s_length_source, s_total_ammonium, s_total_ammonium_class, s_bod5, s_bod5_class, s_chlorophyll_a, s_codcr, s_codmn, s_doc, s_do, s_ec, s_kn, s_nitrate, s_nitrate_class, s_orthophosphates, s_orthophosphates_class, s_os, s_ph, s_silicate, s_t, s_toc, s_tp, s_spm, s_hardness, s_ammonium_avg, a_ammonium_avg_class, s_bod5_avg, s_bod5_avg_class, s_chlorophyll_a_avg, s_codcr_avg, s_codmn_avg, s_do_avg, s_ec_avg, s_kn_avg, s_nitrate_avg, s_nitrate_avg_class, s_orthophosphates_avg, s_orthophosphates_avg_class, s_os_avg, s_ph_avg, s_silicate_avg, s_t_avg, s_toc_avg, s_tp_avg, s_spm_avg, s_hardness_avg

Title	Biology determinants on WISE SoE rivers quality
Name of feature class	m_soe_rivers_biology
Current version	1.0
Creation / Publication Date / Last Update	7.12.2016
Abstract / Definition	Biology determinants on WISE SoE rivers quality stations
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	WISE SoE database
Additional Information, Comments	For year of the data the following top down approach was considered: 2010, 2012, 2011, 2009, 2008.
Number of records	7579
List of attributes	s_waterbas, cc, year, s_inver_norm_eqr_g, s_inver_status_g, s_inver_norm_eqr_e, s_inver_status_e, s_inver_norm_eqr_a, s_inver_status_a, s_inver_norm_eqr_h, s_inver_status_h, s_phytob_eqr_norm_g, s_phytob_status_g, s_phytob_eqr_norm_e, s_phytob_status_e, s_phytob_eqr_norm_a, s_phytob_status_a, s_phytob_eqr_norm_h, s_phytob_status_h

Title	GRDC and EWA monthly average discharges for period 1961 - 1990
Name of feature class	m_grdc_ewa_avg_month_1961_1990
Current version	1.0
Creation / Publication Date / Last Update	7.12.2016
Abstract / Definition	GRDC (including EWA) monthly average discharges for period 1961 - 1990
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	GRDC: http://www.bafg.de/GRDC/EN/02_srvcs/21_tmsrs/riverdischarge_node.html;jsessionid=20614B2013BE4072A35D7BD0A7FBA1EB.live21301
Additional Information, Comments	
Number of records	5536
List of attributes	grdc_no, data_source, jan_61_90, feb_61_90, mar_61_90, apr_61_90, may_61_90, jun_61_90, jul_61_90, avg_61_90, sep_61_90, okt_61_90, nov_61_90, dec_61_90, years_with_data

Title	Soil map SMU
Name of feature class	m_soil_map_smu
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	SMU data of the soil map
Author / Custodian / Contact	JRC
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	JRC ESDAC: http://esdac.jrc.ec.europa.eu/resource-type/european-soil-database-soil-properties - sgdbe4_0
Additional Information, Comments	
Number of records	3856
List of attributes	smu, nonsoil, fao90fu, fao90_fu_p, wm1, wm1_c, wm1_p, txsrfd, txsrfd_c, txsrfd_p, wrbfu, wrbfu_c, wrbfu_p, slopese, slopese_c, slopese_p, parmase3, parmase3_c, parmase3_p, parmase2, parmase2_c, parmase2_p, parmado3, parmado3_c, parmado3_p, parmado2, parmado2_c, parmado2_p, parmado1, parmado1_c, parmado1_p, fao85lv3, fao85lv3_c, fao85lv3_p, fao85lv2, fao85lv2_c, fao85lv2_p, fao85lv1, fao85lv1_c, fao85lv1_p, fao90lv2, fao90lv2_c, fao90lv2_p, fao90lv1, fao90lv1_c, fao90lv1_p, wrbspe2, wrbspe2_c, wrbspe2_p, wrbadj2, wrbadj2_c, wrbadj2_p, wrbspe1, wrbspe1_c, wrbspe1_p, wrbadj1, wrbadj1_c, wrbadj1_p, wrblv1, wrblv1_c, wrblv1_p, wm2, wm2_c, wm2_p, wr, wr_c, wr_p, il, il_c, il_p, roo, roo_c, roo_p, txdepchg, txdepchg_c, twdepchg_p, txubse, txubse_c, txubse_p, txsubdo, txsubdo_c, txsubdo_p, txsrfse, txsrfse_c, txsrfse_p, aglim2, aglim2_c, aglim2_p, aglim1, aglim1_c, aglim1_p, usese, usese_c, usese_p, usedo, usedo_c, usedo_p, parmase, parmase_c, parmase_p, parmado, parmado_c, parmado_p, zmax, zmax_c, zmax_p, zmin, zmin_c, zmin_p, slopedo, slopedo_c, slopedo_p, fao85fu, fao85fu_c, fao85fu_p

Title	Soil map STU
Name of feature class	m_soil_map_stu
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	STU data of the soil map
Author / Custodian / Contact	JRC
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	JRC ESDAC: http://esdac.jrc.ec.europa.eu/resource-type/european-soil-database-soil-properties - sgdbe4_0
Additional Information, Comments	
Number of records	5262
List of attributes	stu, nb_polys, nb_smu, area, wrbfu, wrbfu_cl, fao90fu, fao90fu_cl, fao85fu, fao85fu_cl, slope_dom, slope_sec, zmin, zmax, parmado, parmado_cl, mat1, parmese, pčarmese_cl, mat2, use_dom, use_sec, aglim1, aglim2, textsrfdom, textsrfsec, textsubdom, textsubsec, textdepchg, roo, il, wr, wm1, wm2, cfl

Title	WFD ground water body impact
Name of feature class	m_wfd_gwb_impact
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	WFD GWB impacts affecting each ground water body
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	EEA, WISE WFD masterDatabase20130529: http://www.eea.europa.eu/data-and-maps/data/wise_wfd
Additional Information, Comments	
Number of records	3335
List of attributes	eu_ground_water_body_id, cc, eu_ground_water_body_code, impact_type_code, impact_type_name, other_impact_description, id

Title	WFD ground water body pressures
Name of feature class	m_wfd_gwb_pressures
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	WFD GWB pressures affecting each ground water body
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	EEA, WISE WFD masterDatabase20130529: http://www.eea.europa.eu/data-and-maps/data/wise_wfd
Additional Information, Comments	
Number of records	9361
List of attributes	eu_ground_water_body_id, cc, eu_ground_water_body_code, pressure_type_code, pressure_type_name, other_pressure_description

Title	WFD ground water body status
Name of feature class	m_wfd_gwb_status
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	Quantitative and chemical status of each WFD ground water body
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	EEA, WISE WFD masterDatabase20130529: http://www.eea.europa.eu/data-and-maps/data/wise_wfd
Additional Information, Comments	
Number of records	13382
List of attributes	eu_ground_water_body_id, cc, eu_ground_water_body_code, gw_ms_code, gwb_name, lat, long, area, average_depth, average_thickness, depth_range, capacity, protected_area, geological_formation, quantitative_status, chemical_status

Title	WFD surface water body impact
Name of feature class	m_wfd_swb_impact
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	WFD SWB impacts affecting each surface water body
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	EEA, WISE WFD masterDatabase20130529: http://www.eea.europa.eu/data-and-maps/data/wise_wfd
Additional Information, Comments	
Number of records	119123
List of attributes	eu_surface_water_body_id, cc, eu_surface_water_body_code, sw_ms_code, impact_type, other_impact_description

Title	WFD surface water body pressures
Name of feature class	m_wfd_swb_pressures
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	WFD SWB pressures affecting each surface water body
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	EEA, WISE WFD masterDatabase20130529: http://www.eea.europa.eu/data-and-maps/data/wise_wfd
Additional Information, Comments	
Number of records	170641
List of attributes	eu_surface_water_body_id, cc, eu_surface_water_body_code, sw_ms_code, pressure_type, other_pressure_description

Title	WFD surface water body status
Name of feature class	m_wfd_swb_status
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	Ecological, chemical and hydromorphological status of each WFD surface water body
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	EEA, WISE WFD masterDatabase20130529: http://www.eea.europa.eu/data-and-maps/data/wise_wfd
Additional Information, Comments	
Number of records	127874
List of attributes	eu_surface_water_body_id, cc, eu_surface_water_body_code, sw_ms_code, swb_name, lat, long, protected_area, category, natural_name, ecological_status, chemical_status, hydromorphological_status

Title	MARS river segments linked to WFD SWB database
Name of feature class	m_wfd_swb_tr
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	MARS river segments linked to WFD SWB points and some SWB parameters added
Author / Custodian / Contact	EEA, University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	ECRINS v1.1 (c_tr), WFD SWB database
Additional Information, Comments	ECRINS river segments (c_tr) have been linked to WFD Surface water body points by EEA. For each country separate table has been prepared. For MARS use all tables have been joined in only one. Therefore, rivers flowing along country border get 2 SWB codes and names. Ecological status and pressure type were linked only to first SWB code.
Number of records	236788
List of attributes	tr, ecr_name, eu_swb_name, eu_surface_water_body_code, swb_name1, eu_surface_water_body_code1, m_name

Title	WFD SWB national typology code
Name of feature class	m_wfd_swb_typology
Current version	1.0
Creation / Publication Date / Last Update	30.9.2015
Abstract / Definition	National typology codes of WFD surface water bodies
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	EEA, WISE WFD masterDatabase20130529: http://www.eea.europa.eu/data-and-maps/data/wise_wfd
Additional Information, Comments	
Number of records	265481
List of attributes	eu_surface_water_body_id, cc, eu_surface_water_body_code, sw_ms_code, typology_code, type_name, id, etc_broad_type, category

Title	MARS lakes with MARS river segments (tr) assigned
Name of feature class	m_lakes_tr
Current version	1.0
Creation / Publication Date / Last Update	30.10.2015
Abstract / Definition	MARS lakes with MARS river segments (tr) assigned
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_lakes_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	ECRINS v1.1 (EcrLak.mdb: C_Lak, v_lakInOut), m_lakes_geodatabase_extent
Additional Information, Comments	To each MARS lake all river segments that flows through it are assigned. Lakes without river segment are also included.
Number of records	133040
List of attributes	OBJECTID, lak_id, name, area_km2, area0km2, areaxkm2, size, OBJECT_12, in_out, tr

Title	Share of different land cover categories on lake catchments
Name of feature class	m_lakes_catchments_clc_sel2
Current version	2.0
Creation / Publication Date / Last Update	15.9.2016
Abstract / Definition	Share of different land cover categories on lake catchments for selected lakes
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_lakes_sel2_catchments, m_land_cover
Additional Information, Comments	In comparison to the first version some additional lakes are included as agreed with Task 5.3 group.
Number of records	2658
List of attributes	lak_id, hinterland_area_km2, urban_fabric_11, industrial_commercial_and_transport_units_12, mine_dump_and_construction_sites_13, artificial_non_agricultural_vegetated_areas_14, arable_land_21, permanent_crops_22, pastures_23, heterogeneous_agricultural_areas_24, forests_31, scrub_and_or_herbaceous_vegetation_associations_32, open_spaces_with_little_or_no_vegetation_33, inland_wetlands_41, maritime_wetlands_42, inland_waters_51, marine_waters_52

Title	MARS lakes broad type
Name of feature class	m_lakes_broad_type
Current version	1.0
Creation / Publication Date / Last Update	23.6.2016
Abstract / Definition	Broad lake types assigned to all MARS lakes
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_lakes_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_lakes, WISE SoE database (lake depth), WFD SWB database (etc_broad_type, geology, lake depth), hydrogeological map (IHME 1500_v11 – BGR), Soils of the European Union (SGDBE4 – JRC)
Additional Information, Comments	We assigned 'm_broad_type' to lakes using table "Overview of broad European lake types" by Anne Lyche Solheim. 'Etc_broad_type' is broad type converted from national type (as report at WFD SWB) via table "MS types to broad types_07062015.xlsx". Only lakes with WFD SWB assigned have 'etc_broad_type'. There is an additional documentation on rivers and lakes broad types "Matching codes from WFD SWB database and WISE SoE data base to MARS rivers and lakes and determining broad types for rivers and lakes" as an annex of deliverable D5.1-1.
Number of records	59001
List of attributes	lak_id, m_lake_name, alt_type, lake_area_km2, geology, depth_cate, biogeo_region, m_broad_type, m_broad_type_name, s_waterbas, wfd_swb, cc_typology, etc_broad_type

Title	MARS rivers broad type
Name of feature class	m_rivers_broad_type
Current version	1.0
Creation / Publication Date / Last Update	23.6.2016
Abstract / Definition	Broad river types assigned to all maindrain river segments and to non-main drain river segments with SoE station
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_rivers_tr, m_altitude, m_fec, m_hinterlands_aggregated
Additional Information, Comments	We assigned 'm_broad_type_2' to river segments using table "Overview of broad European river types" by Anne Lyche Solheim. 'Etc_broad_type' is broad type converted from national type via table "MS types to broad types_07062015.xlsx". Only river segments with WFD SWB assigned have 'etc_broad_type'.
Number of records	377912
List of attributes	tr, alt_type, catch_size, geology, biogeo_region, m_broad_type_2, m_bt_name_2, etc_broad_type, maindrain

Title	MARS FEC broad types
Name of feature class	m_fec_river_and_lake_broad_type
Current version	1.0
Creation / Publication Date / Last Update	15.11.2016
Abstract / Definition	To all FEC in MARS extent river and lake broad types are assigned.
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_fec, m_rivers_broad_type, m_lakes_broad_type
Additional Information, Comments	River broad types are assigned from main drain river segment to FEC-s by two different methods: the largest cumulative length of main drain broad type is assigned, broad type of the outflow river segment is assigned. In most cases the both are the same. All FEC-s that contain lakes, have also lake broad type assigned. If there are more lake inside one FEC, the broad type of the largest one is assigned.
Number of records	104334
List of attributes	m_zhyd, f_maindrain_broad_type_2_r, f_outflow_broad_type_2_r, f_broad_type_1

Title	MARS FAT (fish assemblage type)
Name of feature class	m_fish_assemblage_type
Current version	1.0
Creation / Publication Date / Last Update	7.11.2016
Abstract / Definition	Fish assemblage types (FAT) assigned to fish points (EFI+ sites and intercalibration sites) using thresholds (for latitude, altitude, river slope, annual temperature and annual precipitation) from the article Trautwein et al. (2013).
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.acddb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_fish_sites, m_altitude, m_rivers_tr, m_fec_characteristics, article: Trautwein, C., Schinegger, R., Schmutz, S. (2013): Divergent reaction of fish metrics to human pressures in fish assemblage types in Europe. Hydrobiologia, 718:207-220. (doi:10.1007/s10750-013-1616-4)
Additional Information, Comments	
Number of records	14520
List of attributes	site_code, data_source, fish_assemblage_type, latitude, m_slope_promil, t_2001_2010, p_2001_2010, altitude

Title	MARS SoE FAT (fish assemblage type)
Name of feature class	m_soe_fish_assemblage_type
Current version	1.0
Creation / Publication Date / Last Update	11.11.2016
Abstract / Definition	Fish assemblage types (FAT) assigned to WISE SoE stations using thresholds (for latitude, altitude, river slope, annual temperature and annual precipitation) from the article Trautwein et al. (2013).
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_riversquality, m_altitude, m_rivers_tr, m_fec_characteristics, article: Trautwein, C., Schinegger, R., Schmutz, S. (2013): Divergent reaction of fish metrics to human pressures in fish assemblage types in Europe. <i>Hydrobiologia</i> , 718:207-220. (doi:10.1007/s10750-013-1616-4)
Additional Information, Comments	
Number of records	16129
List of attributes	s_waterbas, soe_assemblage_type, latitude, m_slope_promil, t_2001_2010, p_2001_2010, m_altitude

Title	MARS FEC FAT (fish assemblage type)
Name of feature class	m_fec_fish_assemblage_type
Current version	1.0
Creation / Publication Date / Last Update	11.11.2016
Abstract / Definition	Fish assemblage types (FAT) assigned to FEC.
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_fec, m_altitude, m_rivers_tr, m_fec_characteristics, article: Trautwein, C., Schinegger, R., Schmutz, S. (2013): Divergent reaction of fish metrics to human pressures in fish assemblage types in Europe. Hydrobiologia, 718:207-220. (doi:10.1007/s10750-013-1616-4)
Additional Information, Comments	
Number of records	101957
List of attributes	m_zhyd, f_assemblage_type, latitude, m_slope_promil, t_1950_2000, p_1950_2000, altitude

Title	Hydromorphologic stress indicator per FEC
Name of feature class	m_fec_hymo_maes
Current version	1.0
Creation / Publication Date / Last Update	18.1.2017
Abstract / Definition	Hydromorphologic stress indicator as percent of selected MAES land use categories in FEC
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_fec, EEA, Copernicus, MAES: “Riparian zones in Europe (European Environment Agency. Copernicus Initial Operations 2011-2013 - Land Monitoring Service): http://land.copernicus.eu/local/riparian-zones/land-cover-land-use-lclu-image
Additional Information, Comments	Percent of selected land use category in MAES coverage area (buffer zone along main drain rivers) in FEC is calculated. Selected MAES categories are: 3 – woodland and forest, 3.1 – broadleaved forest, 3.2 – coniferous forest, 3.4 – transitional woodland and scrub, 4.2.2 – natural grassland and 9.2 – lakes and reservoirs. The selection was done on the basis of correlation between EFI+ fish metrics and MAES land use categories.
Number of records	101957
List of attributes	m_zhyd, f_maes_31, f_maes_32, f_maes_34, f_maes_3, f_maes_422, f_maes_92

Title	Hydrologic stress indicators per FEC
Name of feature class	m_fec_hydro_stress_indicators
Current version	1.0
Creation / Publication Date / Last Update	15.12.2016
Abstract / Definition	Hydrologic stress indicator per FEC – ratio between modelled flow with abstractions and modelled flow without abstractions
Author / Custodian / Contact	University of Ljubljana, DELTARES, NTUA
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_fec, PCR-GLOBWB modelled flow with abstractions and without abstractions, indicators calculated using IHA software
Additional Information, Comments	Hydrologic stress indicators are calculated as ratio between flow with abstraction and flow without abstractions for different flow parameters. All indicators are given in three (3) classes: IV – increased value, DV – decreased value, NC – no changes. Flows are modelled for period 2001 – 2010.
Number of records	104344
List of attributes	m_zhyd, mean_annual_flow_class, low_pulse_threshold_class, high_pulse_threshold_class, extreme_low_flow_duration_class, high_flow_duration_class, base_flow_index_class, small_flood_duration_class, high_flow_pulses_class

Title	Share of different land cover categories on estuaries' hinterlands
Name of feature class	m_estuary_hinterlands_clc
Current version	1.0
Creation / Publication Date / Last Update	7.6.2016
Abstract / Definition	Share of different land cover categories on selected estuaries' hinterlands
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_estuaries_hinterlands, m_land_cover
Additional Information, Comments	
Number of records	91
List of attributes	fid_estuary, estuary_name, hinterland_area_km2, urban_fabric_11, industrial_commercial_and_transport_units_12, mine_dump_and_construction_sites_13, artificial_non_agricultural_vegetated_areas_14, arable_land_21, permanent_crops_22, pastures_23, heterogeneous_agricultural_areas_24, forests_31, scrub_and_or_herbaceous_vegetation_associations_32, open_spaces_with_little_or_no_vegetation_33, inland_wetlands_41, maritime_wetlands_42, inland_waters_51, marine_waters_52

Title	Population density and count on estuaries' hinterlands
Name of feature class	m_estuaries_hinterland_population
Current version	1.0
Creation / Publication Date / Last Update	
Abstract / Definition	Population density and count on estuaries' hinterlands
Author / Custodian / Contact	University of Ljubljana
Maintenance / Planned Update	
Spatial Extent	m_geodatabase_extent
Dataset Location	MARS_database_v2.accdb http://www3.fgg.uni-lj.si/~mars/MARSgeoDB_v2/
Data Sources	m_estuaries_hinterlands, m_population_density_jrc, m_population_density_gpw
Additional Information, Comments	<p>Population count is the sum of inhabitants from all the FEC-s, from which estuary hinterland is composed. Density is population count divided by estuary hinterland area.</p> <p>In attribute "m_hinterland" there are listed FEC-s, which hinterlands were used to compose estuary hinterlands. Namely, in most cases more than one river is flowing into one estuary.</p> <p>There are two sources for population density. JRC source is more accurate, but it does exist only for EU countries. For FEC-s out of EU, GPW is the source for population density. In some hinterlands the source is combination of both.</p>
Number of records	91
List of attributes	estuary_name, m_hinterland, hinterland_area_km2, estuary_pon, estuary_pod, estuary_pop_source