

\*\* Implemented Improvements

- \* [SOBEK-13094] - Manual: Update RR target level controller.
- \* [SOBEK-14779] - Manual: Add documentation for RR Routing Link.
- \* [SOBEK-18004] - Status of controllers and triggers in His file.
- \* [SOBEK-20567] - Unify the usage of Interacter Online Visualization of Delft3D-FLOW and SobekSIM.
- \* [SOBEK-20663] - Implement steady state computation.
- \* [SOBEK-20751] - Request for adjustable separation character between district and ID (SUF-HYD)
- \* [SOBEK-20761] - Switches and specification for salt in SETTINGS.DAT and PARSEN.FNM.
- \* [SOBEK-20809] - Model crashes in 2.11 with plchdt error, very slow in 2.12.
- \* [SOBEK-20818] - Error message in case of error in STFR-record / removal not-writing river profiles to array table.
- \* [SOBEK-20883] - Changing 2D-breaking dams and 2D-initial water level points in Multiple Data Editor.
- \* [SOBEK-20885] - Minimizing main SOBEK screen.
- \* [SOBEK-20897] - Simulation runs with one friction definition and not with the other.
- \* [SOBEK-20909] - Modification of NTRPLUV(R).INI so that 1,1 cell comes at below left.
- \* [SOBEK-20946] - Im/Export Initial data from/to SUF-HYD.
- \* [SOBEK-20959] - More information about HBV and SCS models.
- \* [SOBEK-20996] - Implement curve number of SCS catchment as real number.
- \* [SOBEK-21020] - More efficient use of server licenses for batch runs with Semaphore feature.
- \* [SOBEK-21024] - No manhole loss calculated for rectangular-shaped pipe.
- \* [SOBEK-21049] - Windows 7 support for USB-dongle drivers.
- \* [SOBEK-21052] - Windows 7 support for SOBEK installation.
- \* [SOBEK-21062] - Simulate should not stop because of license error after just one network 'hick-up'.
- \* [SOBEK-21072] - Do not show Option for Energy Line if Energy Line not available.
- \* [SOBEK-21074] - Add sobeksim.ini option Nosurfacelevelcheck=1 to allow disabling of Fatal error: Surface level is lower than bottom level+ground layer in reachsegment.
- \* [SOBEK-21078] - Manual: Add RR 2-stage and V-notch weir description.
- \* [SOBEK-21085] - SOBEK can compute with timestep smaller than 1s.
- \* [SOBEK-21089] - New Process Library Configuration Tool due to incorrect license check on some systems.
- \* [SOBEK-21093] - Block interpolation option of C(x,Q) in River UI.
- \* [SOBEK-21106] - 2D conveyance approach.
- \* [SOBEK-21114] - Set OpenWaterSeepage and OpenWaterPrecipitation in Delft\_3B.ini to -1.
- \* [SOBEK-21119] - In the multiple data editor, you cannot sort on ID.
- \* [SOBEK-21135] - Driver-free installation of the license manager.
- \* [SOBEK-21139] - When running under SOBEK, let PLCT.EXE check on the SOBEK License Feature names.
- \* [SOBEK-21148] - Remove RR-Validation (RRCHECK) from SOBEK system.
- \* [SOBEK-21149] - Update of Windows 7 support for USB-dongle drivers (5.70 ->5.75)
- \* [SOBEK-21154] - Error message: "Fatal error in subroutine plchdt" is unclear.
- \* [SOBEK-21157] - Update of MSSTDFMT.DLL.
- \* [SOBEK-21166] - Give storage functionality to RR-Flow Connection node.
- \* [SOBEK-21178] - Extension and bug solving for SBKBATCH.
- \* [SOBEK-21188] - River Flow + WQ simulation mode not possible.
- \* [SOBEK-21190] - Combined RR+CF+SF+Overlandflow simultaneously.
- \* [SOBEK-21216] - Street storage in Connection Nodes only uses block function (ModelEdit)
- \* [SOBEK-21218] - Finish window desired after adding license file.
- \* [SOBEK-21223] - Buffered reading of files.
- \* [SOBEK-21272] - Remove unused option "use left and right levels as different embankments" from Overland Flow options.
- \* [SOBEK-21274] - Street storage in Connection Nodes only uses block function (DelftFlow)
- \* [SOBEK-21276] - Write correct dispersion to his file.
- \* [SOBEK-21277] - Parameterize the maximal dispersion.
- \* [SOBEK-21282] - Manual: Update of chapter "The Delft Software License Manager".
- \* [SOBEK-21320] - Create and present SUF-HYD export log-file so user can check export process.
- \* [SOBEK-21339] - Upgrade FlexLM-tools from 11.5 to 11.8.
- \* [SOBEK-21376] - Functionality for generating S-Curves.
- \* [SOBEK-21397] - Manual: Update of Culvert in 2.12.002 documentation.
- \* [SOBEK-21419] - Manual: Update of Siphon in 2.12.002 documentation.
- \* [SOBEK-21420] - Manual: Update of Inverted Siphon in 2.12.002 documentation.
- \* [SOBEK-21459] - Change real parameters for structures from single precision into double precision.
- \* [SOBEK-21508] - Correction for ground layer in cross sections calculated exactly.
- \* [SOBEK-21519] - Change in administration of valve losses.
- \* [SOBEK-21529] - Storage graph specification for connection nodes with storage and lateral flow.
- \* [SOBEK-21585] - Remove outdated installation choices from SOBEK setup.
- \* [SOBEK-21641] - SOBEK-RE import error when importing an empty SOBEK-RE case shows no error.
- \* [SOBEK-21657] - SOBEK end time<->delft3D endtime error message when simulating 1D3D with SOBEK steady state option.
- \* [SOBEK-21676] - SOBEK starttime <->delft3D starttime error message when SOBEK start time was not 00:00:00.
- \* [SOBEK-21715] - Change error message for Internal error 3B-CMPOVH: IOW=IBND=0.
- \* [SOBEK-21721] - Error in sub Splf13 when using large evaporation file.
- \* [SOBEK-21745] - Remove option to add ground layers to asymmetrical trapezoidal profiles.
- \* [SOBEK-21757] - Import SUF-HYD \*AFK records creates PLVA definitions for each \*AFK-record.
- \* [SOBEK-21758] - Increase range of exported SUF-HYD \*Pro definitions.
- \* [SOBEK-21773] - No double \*PRO-records in SUF-HYD file.
- \* [SOBEK-21790] - Warning message when opening new project in old SOBEK version.
- \* [SOBEK-21839] - Importing SOBEK-RE models including simulation period.
- \* [SOBEK-21842] - Include object name in warnings when importing SOBEK-RE models.
- \* [SOBEK-21843] - Option of setting constant value of 0 for "2nd station", "F(H)" en "Retention".
- \* [SOBEK-21867] - Fatal error: Surface level is lower than bottom level+ground layer in reachsegment.
- \* [SOBEK-21868] - Adapt ODS\_View 3.23.0003 which is Window 7 compatible.
- \* [SOBEK-21869] - Adapt DS\_Flex 5.08.02.
- \* [SOBEK-21889] - Several SOBEK-RE Import issues.
- \* [SOBEK-21964] - Conversion Tool: If the model schematistion contains cross sections, "1D-Flow-River" should be activated in the Sobek-RUR case manager under "Settings".
- \* [SOBEK-21974] - 2.12.002 beta SOBEK.log messages concerning automatic change in network due to culvert height unclear.
- \* [SOBEK-21976] - Generate \*PRO-Records in alphabetical order when exporting to SUF-HYD.
- \* [SOBEK-21991] - Maintenance on River Friction in Data Editor.
- \* [SOBEK-22012] - Implement Switch to run SIMULATE silent.
- \* [SOBEK-22116] - Update of Options in NTRPLUV(R).INI.
- \* [SOBEK-22118] - Replace old COMCT232.OCX by new MSCOMCT2.OCX.

\*\* Resolved issues

- \* [SOBEK-18497] - Limitation for QLat when NoNegativeQlatWhenThereIsNoWater.
- \* [SOBEK-19367] - SOBEKSIM shows RTC pump setpoint as crest level.

- \* [SOBEK-19482] - Problems with lateral outflow in Rural (CF)
- \* [SOBEK-19686] - Double IDs in SUF-HYD generated by export to SUF-HYD.
- \* [SOBEK-19729] - Wind in combination with groundlayer and chance of draught causes crash.
- \* [SOBEK-19786] - Implementation of Switch for NoNegativeQlatWhenTherelsNoWater (SOBEK-18497) does not work correctly yet.
- \* [SOBEK-19838] - Boundary and manhole produced on same location automatically when importing SUF-HYD.
- \* [SOBEK-19839] - Loss pipe profile data for SUF-HYD import/export.
- \* [SOBEK-20295] - SUF-HYD export/import problems.
- \* [SOBEK-20324] - Inconsequent behaviour of SOBEK-modules when Restart Files cannot be used. (DELFTFLOW)
- \* [SOBEK-20348] - SCS functionality gives different results with VS2005 compiler.
- \* [SOBEK-20359] - When selecting a node before pointing to Node Properties may delete node.
- \* [SOBEK-20531] - Salt wedge as implemented 'behind the screens' unstable, balance error.
- \* [SOBEK-20585] - RR-Flow-RTC-1D2D ok for single event, series event crashes in Flow on Simloc.inp (which is identical to single event file Simloc.inp), both in 2.11.002c and my 2.12.000.08.
- \* [SOBEK-20591] - Storage graph exits with error 9: subscript out of range.
- \* [SOBEK-20627] - Balance error due to missing calculation point.
- \* [SOBEK-20664] - Sobeksim passes wrong data to RTC for breaking dam.
- \* [SOBEK-20666] - SOBEK-salt computations.
- \* [SOBEK-20667] - Inconsequent behaviour of SOBEK-modules when Restart Files cannot be used. (DELWAO)
- \* [SOBEK-20679] - Thatcher-Harleman in SOBEK-River not correct.
- \* [SOBEK-20754] - Memory errors different in XP and Vista.
- \* [SOBEK-20805] - Simulation time 1 hour, should be 10 minutes.
- \* [SOBEK-20817] - Initial Q in subsections incorrect.
- \* [SOBEK-20834] - Sideview in schematisation incorrectly gives license errors when no RF license is available.
- \* [SOBEK-20838] - RR should give error message when obligatory keyword is missing in input files (can happen if input is generated outside SOBEK).
- \* [SOBEK-20859] - WQ validation check fails (or even corrupts input files)
- \* [SOBEK-20899] - Simulation should stop in case surface level is below the bottom level.
- \* [SOBEK-20903] - Maximum Courantnumber on structures should not be displayed in Online Visualization.
- \* [SOBEK-20904] - Incorrect data to RTC.
- \* [SOBEK-20905] - Performance drop.
- \* [SOBEK-20907] - DELFTFLOW.EXE license check must handle all structures the same for SOBEK\_RF and SOBEK\_CF.
- \* [SOBEK-20912] - STORAGE doesn't work.
- \* [SOBEK-20935] - Discharge in subsections is not correct.
- \* [SOBEK-20936] - Multiple Data Editor writes the initial discharge wrong in file.
- \* [SOBEK-20937] - Lateral on a Connection node can give a balance error.
- \* [SOBEK-20944] - Salinity sbdpar read error after enlarging dimensions.
- \* [SOBEK-20955] - Improved 2D boundary & 1D2D Internal boundary conditions; i.e. renewal of suspended SOBEK-20898 (Wicon2D)
- \* [SOBEK-20966] - No warning in the "SOBEK.log" file for altered BoB's in case of "AutomaticStruLinkBobAdjustmentTreshold>0".
- \* [SOBEK-20972] - 1D Dam Break Breach width not expanding.
- \* [SOBEK-20974] - Culvert exit loss coefficient uses incorrect downstream waterdepth.
- \* [SOBEK-20986] - Siphon not working correctly (Negative Flow must not be specified for Siphon).
- \* [SOBEK-20988] - Error when end of KASGEER file is reached.
- \* [SOBEK-21008] - Warning message on large balance error results into fatal ERROR message and failing simulation.
- \* [SOBEK-21012] - No effect after changing manning value when groundlayers are used.
- \* [SOBEK-21043] - Plchdt crash in NNT model.
- \* [SOBEK-21058] - Siphon and Inverted Siphon exit loss coefficient uses incorrect downstream waterdepth.
- \* [SOBEK-21060] - SOBEK Shell size and location not stored when closed by EXIT-button.
- \* [SOBEK-21064] - When using a valve in a culvert, in free flow the valve loss coefficient is incorrectly computed.
- \* [SOBEK-21066] - When using a valve in a siphon (also inverted), the valve loss coefficient is incorrectly computed.
- \* [SOBEK-21067] - Computation of discharge in Siphon and Inverted Siphon incorrectly not limited by Critical flow depth.
- \* [SOBEK-21068] - Misleading Column name in Valve Loss Coefficient Table for Culvert, Siphon and Inverted Siphon.
- \* [SOBEK-21069] - Starting Sideview sometimes produces an error on Windows 7.
- \* [SOBEK-21070] - SIDEVIEW crashes while opening the Animation Setup Window while animation is running.
- \* [SOBEK-21076] - Power Coefficient of V-Notch cannot be edited in the Single data Editor.
- \* [SOBEK-21077] - Culvert calculates incorrect friction losses, when a valve is added to the structure.
- \* [SOBEK-21080] - Friction table for YZ-Profile sometimes opens in wrong status and is not usable in normal way.
- \* [SOBEK-21100] - Salt on 1D restart.
- \* [SOBEK-21101] - Reprofunctions do not work.
- \* [SOBEK-21105] - Improved error message for 1D2D crash due to reaching memory limit.
- \* [SOBEK-21110] - SOBEK WQ fails due to missing PTHREADVCE.DLL.
- \* [SOBEK-21121] - When Shell is maximized and then restored back it is consuming one processor totally until resized.
- \* [SOBEK-21122] - Overland Flow Keyword 'Minimum2DDikeHeightLimit' misspelled as 'Minimum2DDikeHeighLimit'.
- \* [SOBEK-21128] - Run-time error 91: Object variable or With block variable not set.
- \* [SOBEK-21147] - SOBEK\_RR VS2008 gives stack overflow on Assen model.
- \* [SOBEK-21159] - Special areas in NWRW node cause balance error.
- \* [SOBEK-21172] - Not all manhole losses are calculated.
- \* [SOBEK-21174] - Import of SOBEK-RE network fails due to triggers that reference non existing branches.
- \* [SOBEK-21180] - Flow area calculated wrong when using ground layer in YZ-Profiles.
- \* [SOBEK-21181] - Cross-section on top of 1D Boundary Node with Netter option to locate calculation point on cross-sections gives a crashing Parsen.
- \* [SOBEK-21192] - In SOBEK.log message "Reading vegetation table file" is given in case user did not specify such table. This is confusing!
- \* [SOBEK-21193] - Restart file not used due to problem with reading and writing a restart file in one simulation.
- \* [SOBEK-21215] - Not understood time step reduction in UK Benchmark test T7.
- \* [SOBEK-21280] - Problem with pillar bridge in combination with summer dike.
- \* [SOBEK-21291] - WINBOS vs SOBEK.
- \* [SOBEK-21292] - SUF-HYD export of the boundary condition of an external weir is not consistent.
- \* [SOBEK-21297] - Add detailed flow output at NWRW nodes to enable coupling with Emission module.
- \* [SOBEK-21299] - When installing Programs on C:\, Models on D:\, the files Bergcoef.\*, Cropfact, Crop\_ow, Kas\* are incorrectly referred to on C:\ in 3BEdit.Fnm.
- \* [SOBEK-21307] - Out of memory problem when importing SOBEK-RE model.
- \* [SOBEK-21325] - Edit User Defined Objects window can be blank when focus is changed.
- \* [SOBEK-21335] - Pre-processor error: record does not fit in buffer.
- \* [SOBEK-21346] - Case Analysis tool functionality "Card" causes problems in 64-bit Windows.
- \* [SOBEK-21348] - At start up of CAT SELAPPS overwrites saved CAT-settings.
- \* [SOBEK-21356] - SETTINGS.CAT not properly updated.
- \* [SOBEK-21362] - For critical flow conditions, siphon discharge increases when downstream water level is lowered.
- \* [SOBEK-21363] - Culvert discharges with groundlayer not understood.
- \* [SOBEK-21369] - Restart file in series not used properly when the number of controllers in model does not match number of controllers in restart file.
- \* [SOBEK-21379] - Siphon, large discharge deviations (computed versus analytical) for free flow condition.
- \* [SOBEK-21380] - When no storage at boundary NODE-Record must be removed or not written.
- \* [SOBEK-21381] - Checking if Siphon is fully filled at its upstream side is done with the mean of upstr and dwnstr Bob instead of its upstream Bob.
- \* [SOBEK-21382] - Siphon, large difference in analytical and SOBEK computed drowned flow discharge.
- \* [SOBEK-21386] - CARD-Button of CAT only functioning well under Windows XP 32-bits, removed for other Windows versions.
- \* [SOBEK-21388] - Valve Table in Siphon and Inverted Siphon was not corrected for groundlayer.

- \* [SOBEK-21389] - Determination of calculation point in 2D-Grid sometimes goes wrong.
- \* [SOBEK-21390] - Implementation in SOBEKSIM.ini of keyword [ SiphonUpstreamThresholdSwitchOff ] in order to avoid numerical oscillations.
- \* [SOBEK-21425] - Missing fpspr60.ocx in setup.
- \* [SOBEK-21438] - Exporting to excel fails in Case Analysis Tool.
- \* [SOBEK-21442] - Creating SUF-HYD file from Lit-directory which starts with number goes wrong.
- \* [SOBEK-21447] - SOBEK run fails when used with OpenMI due to memory leak.
- \* [SOBEK-21454] - SOBEK-RE model RijntakQ does not run after importing.
- \* [SOBEK-21461] - Minor change in advection scheme repaired.
- \* [SOBEK-21464] - Interpolation of circle cross sections along the reach is not correct.
- \* [SOBEK-21488] - SOBEK-Flow passes wrong discharges to RTC.
- \* [SOBEK-21502] - RR water balance error RR-Bandung case.
- \* [SOBEK-21532] - Warning when opening manholes in Multiple Data Editor and Save without changing tables.
- \* [SOBEK-21553] - Loading RR restart files causes Error in sub RdrestAscii Unexpected end of file in inputfile: Restart file.
- \* [SOBEK-21559] - Maximum amount of timesteps in sbkbatch is 20000.
- \* [SOBEK-21569] - SUF-HYD imports lateral flow, but does not export.
- \* [SOBEK-21581] - Difference in Universal Weir results when using Current or Maximum output options.
- \* [SOBEK-21587] - Crash in model SOBEK Rural 2D without message.
- \* [SOBEK-21589] - Streetlevel of Flow-connection node with Lateral and storage is not plotted correctly (is internally 999999)
- \* [SOBEK-21593] - Simple RR model crashes without error due to weir crest width of 0.
- \* [SOBEK-21609] - Parser crash: severe (64): input conversion error after combining models
- \* [SOBEK-21616] - Confusing Options button has to be removed from report window.
- \* [SOBEK-21625] - UPDATE does not add PDIN-data to node storage tables when only one needs update.
- \* [SOBEK-21626] - RR VS2008 version updated with compiler option /fpe0 (to stop on 0/0 and other problems).
- \* [SOBEK-21637] - Delftflow.exe crashes.
- \* [SOBEK-21640] - Delftflow.exe crashes in combination with RTC.
- \* [SOBEK-21651] - Incorrect 0' ml in trigger.def after SOBEK-RE import.
- \* [SOBEK-21659] - Conversion of SOBEK-RE NDB model with non-used controller gives problems.
- \* [SOBEK-21664] - ModelPaste problems with ZW\_Delta model.
- \* [SOBEK-21687] - Do not use predefined process does not disable Use predefined process.
- \* [SOBEK-21690] - SOBEK-Rural crest level fluctuates when Interval controller is activated.
- \* [SOBEK-21693] - SOBEK Rural crest level fluctuates when PID controller is activated.
- \* [SOBEK-21703] - References to compound structures in trigger are not written correctly.
- \* [SOBEK-21711] - MODELEdit writes wrong keyword for Initial Q as function of Place.
- \* [SOBEK-21712] - Case analysis error 76: Path not found.
- \* [SOBEK-21717] - Fatal error in subroutine soofil, Unable to open definition file sobek.rda.sobek.rdf.
- \* [SOBEK-21718] - Information from Select - 2D grid cell info inconsistent due to changed row numbering.
- \* [SOBEK-21719] - Editing 2D grid still uses old row numbering, different from Netter.
- \* [SOBEK-21724] - Bottom level appears not to be used in Pillar bridge computation. Hence, omit the "bottom level" input field in User Interface in Pillar bridge definition.
- \* [SOBEK-21741] - Make keywords in SOBEKSIM.INI case insensitive.
- \* [SOBEK-21744] - New SUF-HYD exporter sbk2sufhyd doesn't export \* AFK (special area's), while older versions do export \* AFK.
- \* [SOBEK-21747] - Incorporate option "SiphonUpstreamThresholdSwitchOff = 0.1" under [SimulationOptions] in "SOBEKSIM.ini" of release versions.
- \* [SOBEK-21748] - Incorporate option "MaxVolFact=0.9" under [SimulationOptions] in "SOBEKSIM.ini" of release versions.
- \* [SOBEK-21764] - Unclear crash without error caused by y/z profiles in SOBEK 2.11 and newer.
- \* [SOBEK-21777] - AFK-records missing in SUF-HYD export.
- \* [SOBEK-21783] - Wrong version in SUF-HYD-export logging file.
- \* [SOBEK-21784] - Mike11 import stops with error: Object variable or With block variable not set.
- \* [SOBEK-21791] - Single Data Editor does not always show storage definition correctly on Paved nodes.
- \* [SOBEK-21795] - Water use per inhabitant is not imported correctly for SUF-HYD.
- \* [SOBEK-21807] - Data Editor checks on storage areas on boundaries while storage has been switched off.
- \* [SOBEK-21821] - Simulate hangs when "Close Automatically" is disabled.
- \* [SOBEK-21824] - Setup shows warning "This program might not have been installed correctly" on Windows 7 Home edition.
- \* [SOBEK-21834] - Q-h relation is not stable.
- \* [SOBEK-21840] - Importing SOBEK-RE models does not always correctly import initial conditions.
- \* [SOBEK-21844] - Import of SOBEK-RE Q-h boundary direction is incorrect.
- \* [SOBEK-21853] - Conversion of gate opening height to gate lower edge level for SOBEK-RE import.
- \* [SOBEK-21857] - Setting overrules Current output by Mean output.
- \* [SOBEK-21861] - Update of predefined subsets due to processes BODCOD and DBOD\_TEWOR.
- \* [SOBEK-21878] - Output at structures, pump: output of crest width should be missing value! At the moment, it is equal to the discharge.
- \* [SOBEK-21904] - Conversion of SOBEK-RE diffuse lateral to SOBEK-River lateral not correct (diffuse series in m2/s converted as is and used as discharge series in m3/s).
- \* [SOBEK-21909] - Bug in monitoring areas WQint.
- \* [SOBEK-21916] - In ModelEdit for the Controllers 'Gate height' is used in stead of 'Gate Lower Edge Level'.
- \* [SOBEK-21929] - Access violation during pre-processor if number of used controllers is greater than the number of defined controllers.
- \* [SOBEK-21930] - Access violation during pre-processor after importing SOBEK-RE model.
- \* [SOBEK-21955] - Remove button "Edit Storage on Surface L" voor Y-Z and Asymetrical Trapezimum profile in ModelEdit.
- \* [SOBEK-21970] - Missing \*PRO-records when exporting to SUF-HYD.
- \* [SOBEK-21987] - Ground layers for culverts and cross sections not visible in user interface.
- \* [SOBEK-22006] - Conversion tool: transfer of controller parameter "Gate Height" for general structures.
- \* [SOBEK-22067] - Conversion Tool: Subscript out of range error in Sub Convert when importing a Sobek-RE-schematisation.
- \* [SOBEK-22077] - Problem with AREA zero in WQ coupling.
- \* [SOBEK-22092] - Culvert editor creates double profile definition.
- \* [SOBEK-22141] - WQ parallel with Flow can use wrong option.
- \* [SOBEK-22222] - Default storage of connection node with storage is 0.
- \* [SOBEK-22241] - Velocity undefined if Volume = 0.