

Interactive comment on “Eco-environmentally friendly operational regulation: an effective strategy to diminish the TDG supersaturation of reservoirs” by J. Feng et al.

Anonymous Referee #2

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In this manuscript, the authors introduce a numerical model to investigate the transport and dissipation processes of total dissolved gas (TDG). The case studies simulated the fate and transport of TDG within the water body in different regulation schemes, and suggested an eco-environmentally friendly operational regulation. The subject is meaningful because an optimized operational regulation of reservoirs is important to diminish the ecological risks due to artificial structures. However, this manuscript has some issues and needs. 1) the authors need to provide direct evidence to demonstrate if the water transport processes in the computational reservoir could be simplified into a vertical two dimensional numerical model. 2) The authors should also provide more

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information about the model methods such as what water quality parameters are included in the water quality model. 3) More seriously, the model calibration and validation was lack of detailed information to show the performance of this model in the Bala Reservoir, so that the accuracy of model results was not clear. 4) What's more, the relationship between TDG and environmental quality has not been described clearly enough to present what operational regulation scheme is the most eco-environmentally friendly.

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