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Referring to the equation (4-3) from the chapter

S = P + Qin, + Iin - Qout - Iou t- R - E - T

Here

S represents the change in storage, P is  precipitation, Qin is Inflow,  Iin  is base flow, Qout is an outflow, Iou is infiltration or seepage, R is  runoff , E is evaporation & T is transpiration

Terms in above said formula is given in m3 /s Converting them into m/month:

i) Inflow (Qin)

Inflow is 3.26 m3 per second,

March has 2678400 seconds (i.e 31\*24\*60\*60)

Inflow per march is  8731584m3 (i.e 3.26 x 2678400m3 )

Area of the lake is length x breadth, i.e 12 x 2.5 = 30 km2

Depth of flow is (Volume inflow) / (Area)

∴Substitute Volume is 8731584 & area is 30\*106

∴Depth of inflow during March(Qin) is  0.2910528 m

ii) Outflow (Qout)

Outflow during March = 2.9 m3/s

Following the above-said procedure for(Qin), Depth of outflow during March is(Qout)0.2615904m

Referring to the above-said equation, i.e S = P + Qin, + Iin - Qout - Iou t- R - E - T

Substitute  P is 0.152 (i.e 15.2cm), Qin is  0.2910528 m ,  Iin is 0, Qout 0.2615904 m, Iou t is 0.025, R is 0,   E is 0.12, T is 0

S   = 0.152 + 0.2910528 + 0 - 0.2615904 - 0.025 - 0  0.102 - 0

      = 0.4430528 - 0.3885904

Change in Storage  is 0.0544624 m

∴ Volme change in storage during March = storage depth x area

        = 0.0544624 x 30 x 106

        = 1633872 m3

∴ change in storage during the month of March is 1633872m3