Water Harvesting from Roads in Tigray, Northern Ethiopia: In Figures

By:

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Example: Negative Effects of Water from Roads in Tigray, Ethiopia

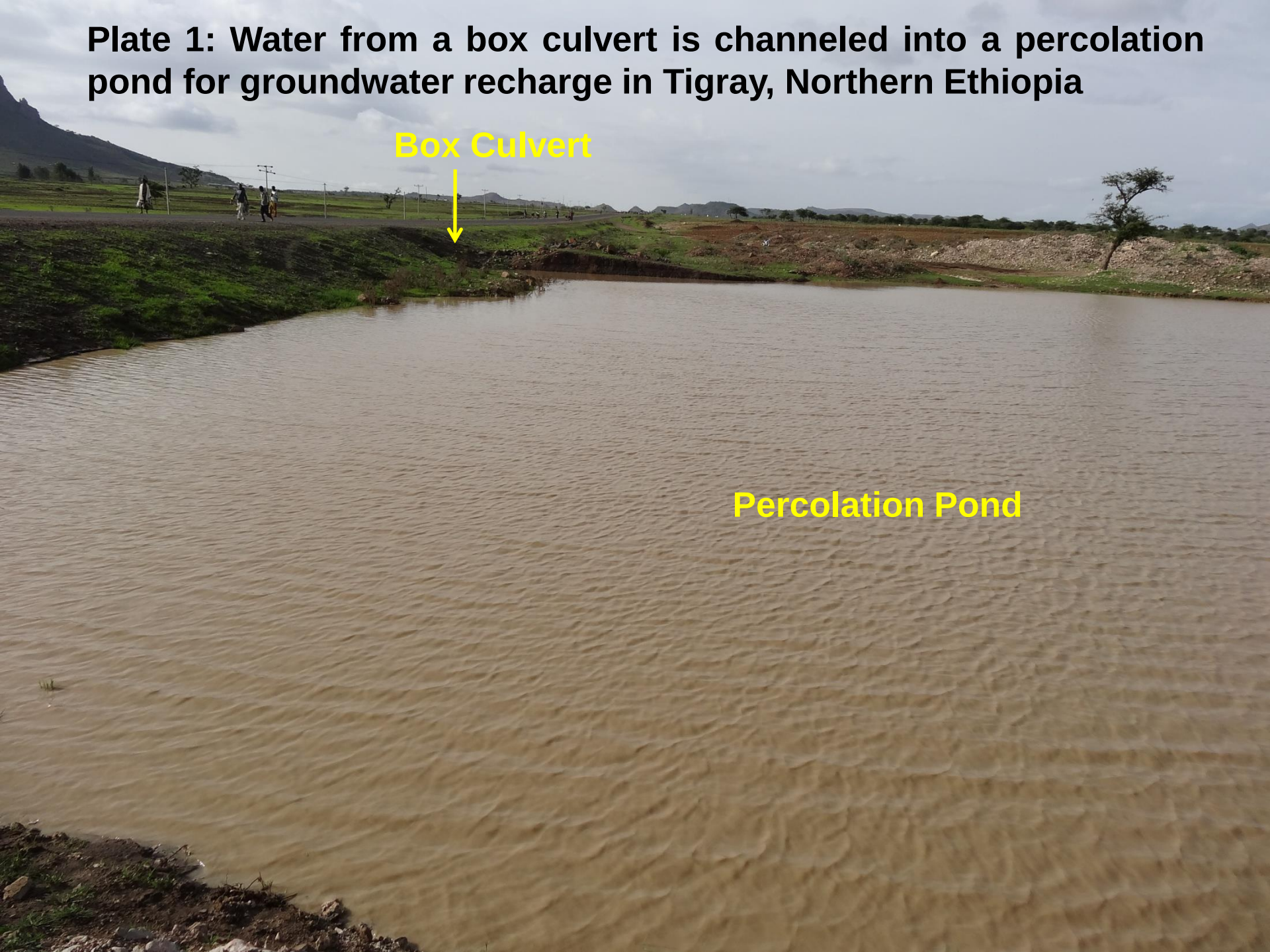


Plate 1: Water from a box culvert is channeled into a percolation pond for groundwater recharge in Tigray, Northern Ethiopia

Plate 2: Water from a box culvert is channeled into a percolation pond for groundwater recharge in Tigray, Northern Ethiopia
(side view of Plate1)

Plate 3: Water from a box culvert is channeled into a percolation pond for groundwater recharge in Tigray, Northern Ethiopia
(Downstream view of Plate 1)

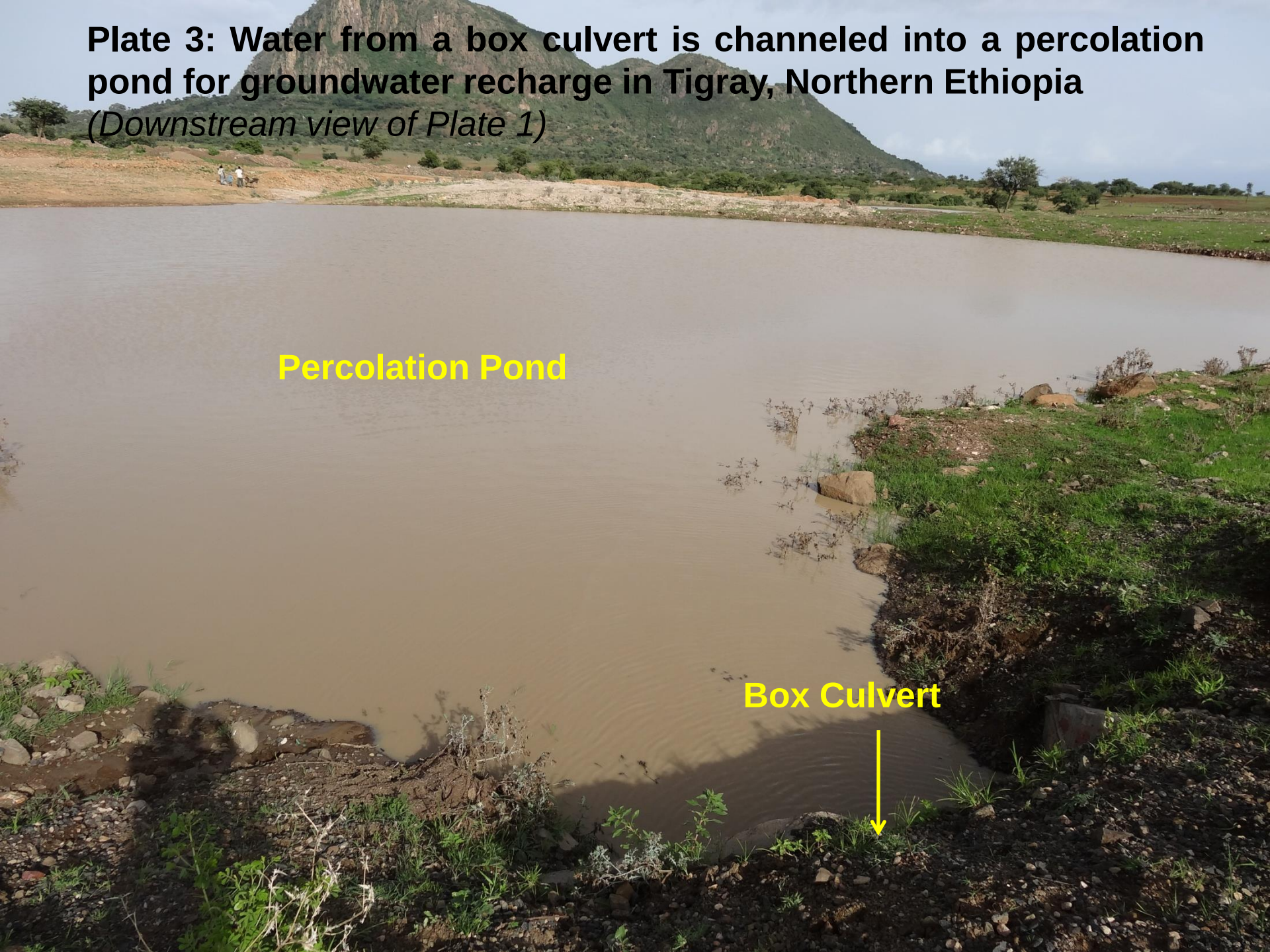


Plate 4: Water from a box culvert is channeled into a percolation pond for groundwater recharge in Tigray, Northern Ethiopia (Upstream view of Plate 1)

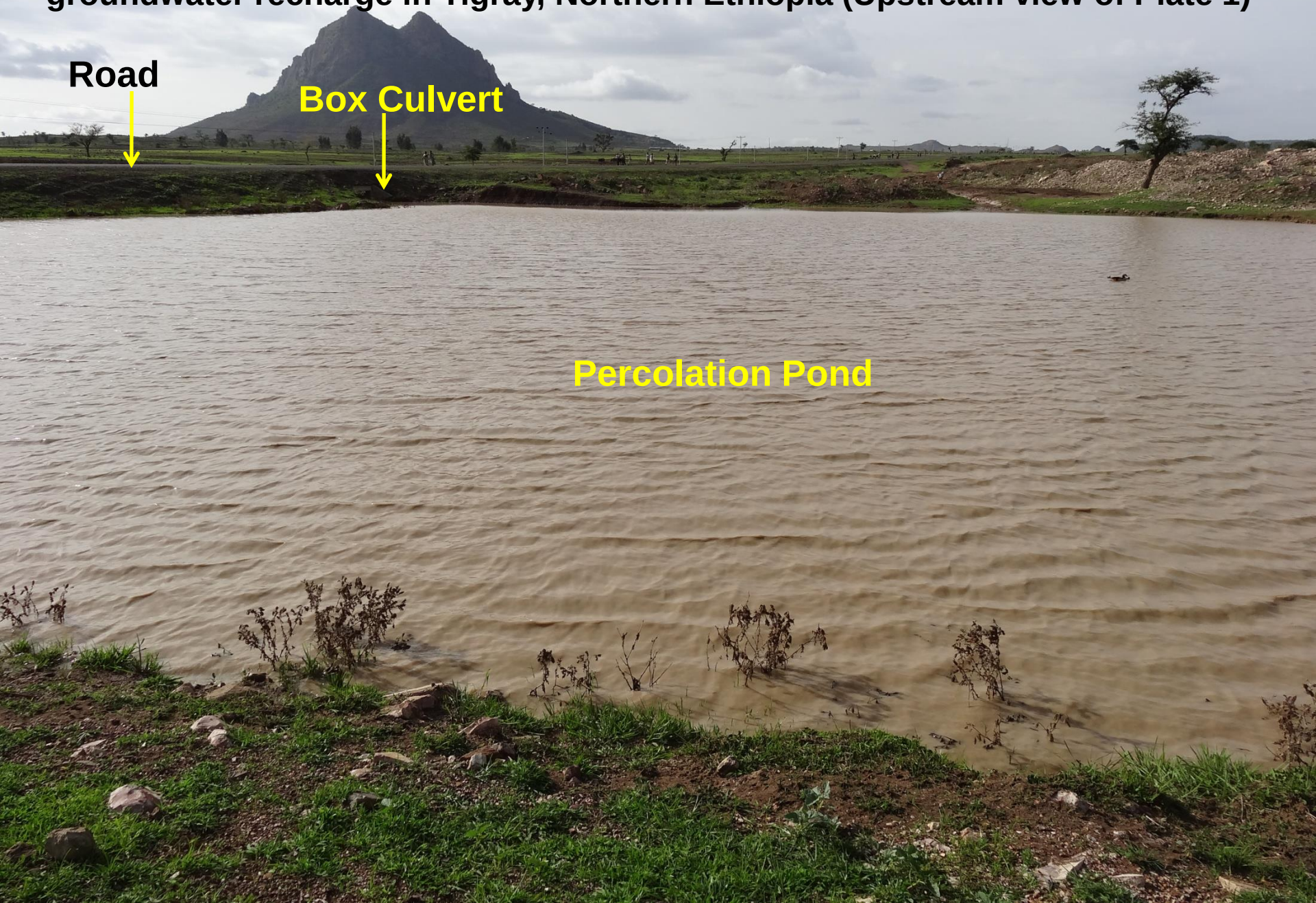
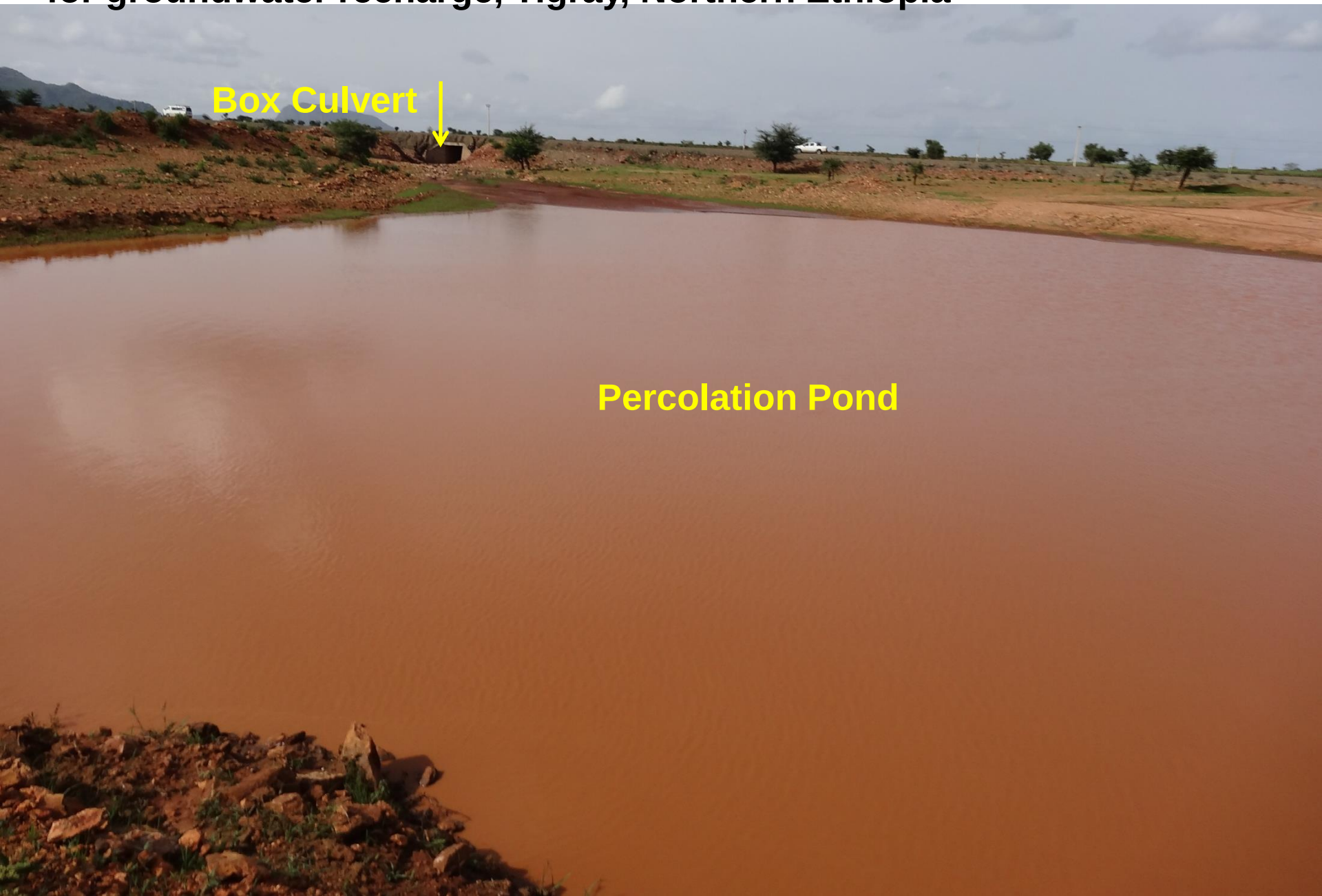


Plate 5: Road side drainage channeled into percolation pond for groundwater recharge in Tigray, Northern Ethiopia

Plate 6: Road side drainage connected to percolation pond for groundwater recharge in Tigray, Northern Ethiopia (Side view of plate5)

Plate 7: Road side drainage connected to percolation pond for groundwater recharge in Tigray, Northern Ethiopia (side view of Plate 6)

Plate 8: Water from a box culvert is channeled into a percolation pond for groundwater recharge, Tigray, Northern Ethiopia



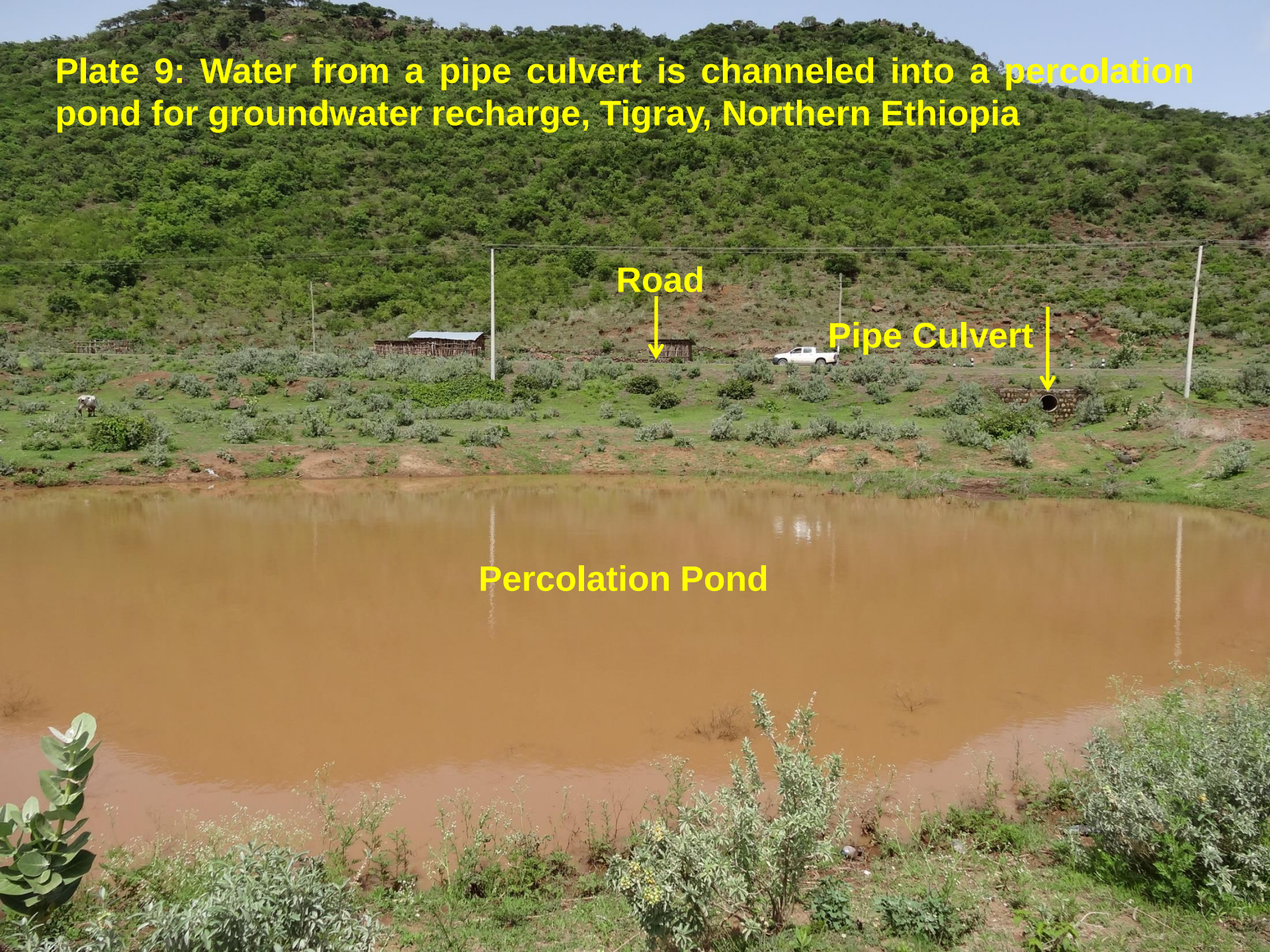


Plate 9: Water from a pipe culvert is channeled into a percolation pond for groundwater recharge, Tigray, Northern Ethiopia
Road
Pipe Culvert
Percolation Pond


Plate 10: Water from culvert is channeled into check-dams which enhances groundwater recharge, Tigray, Northern Ethiopia
Road
Check-dam
Hand-dug well

Plate 11: Farmers diverting water from a culvert into a percolation pond for supplementary irrigation and groundwater recharge in Tigray, Ethiopia

Plate 12: Diverting water from a culvert into a percolation pond for supplementary irrigation and groundwater recharge in Tigray, Ethiopia (same site as Plate 11)

Plate 13: Farmers preparing for diverting water from a culvert into a pond for supplementary irrigation and groundwater recharge, Tigray, Northern Ethiopia (Site in Plate 11 and 12)

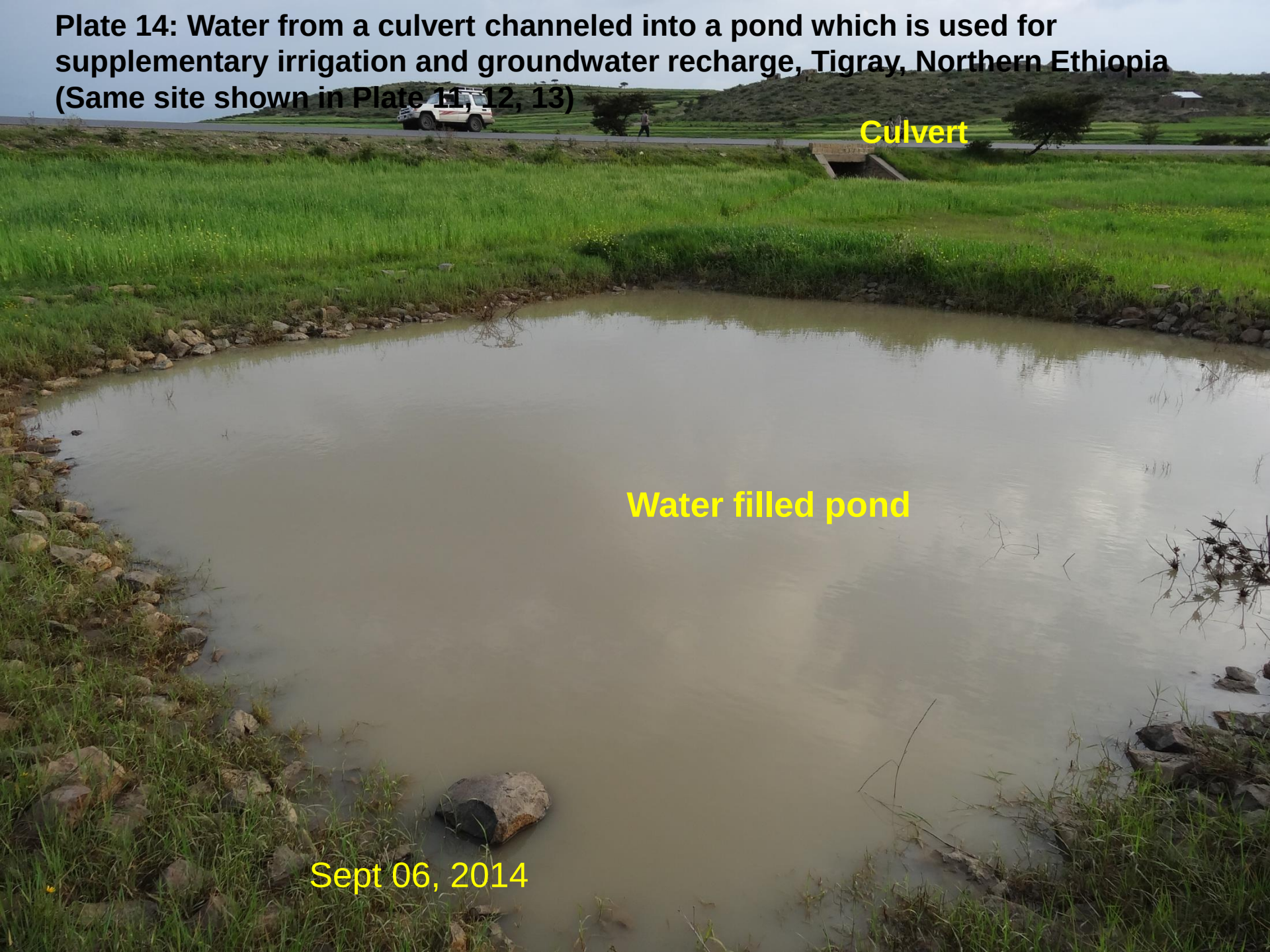


Plate 14: Water from a culvert channeled into a pond which is used for supplementary irrigation and groundwater recharge, Tigray, Northern Ethiopia (Same site shown in Plate 11, 12, 13)
Culvert
Water filled pond
Sept 06, 2014

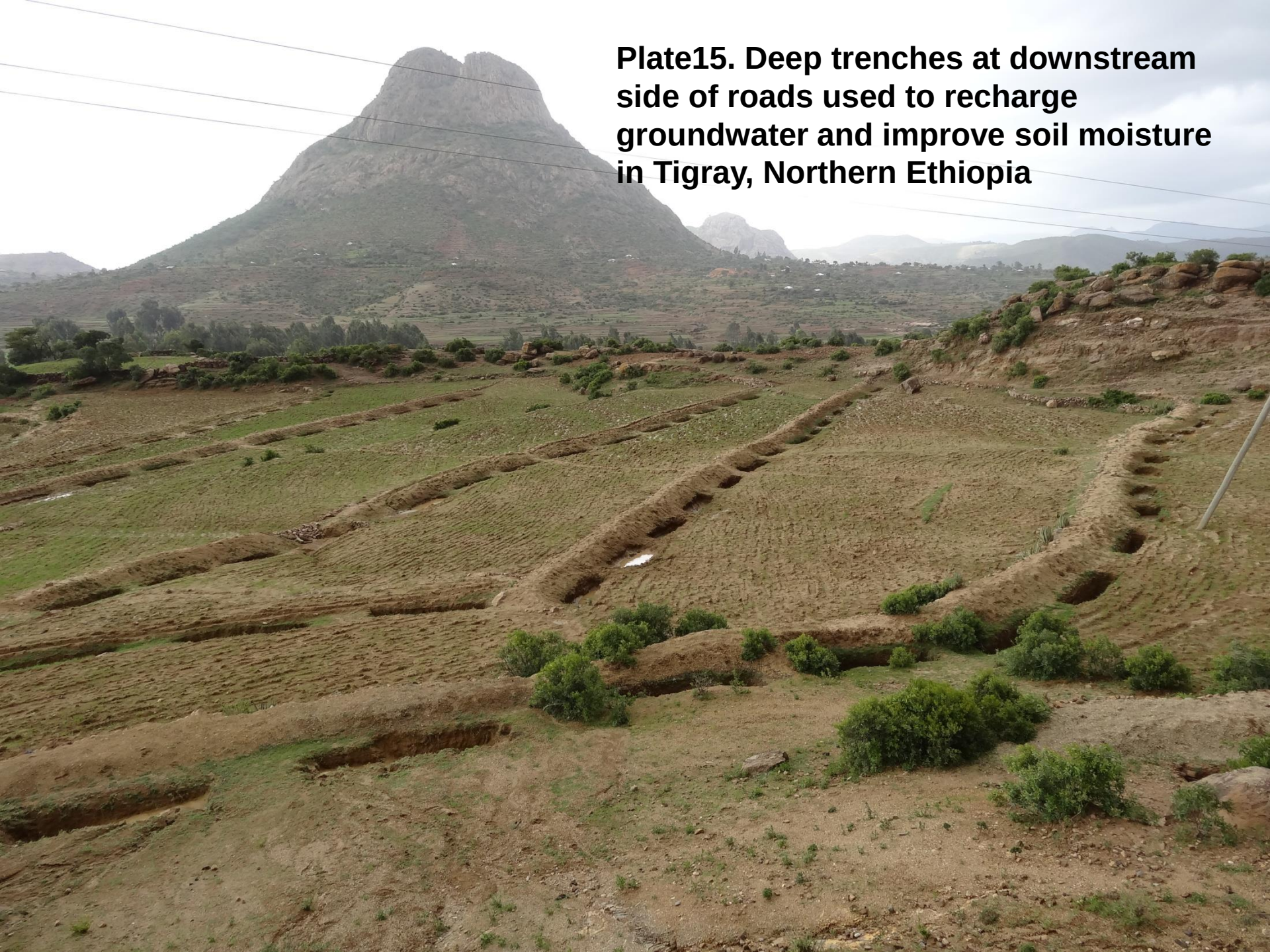


Plate15. Deep trenches at downstream side of roads used to recharge groundwater and improve soil moisture in Tigray, Northern Ethiopia

Plate 16a. Road side ponds to recharge groundwater and enhance in-situ moisture in soils in Tigray, Northern Ethiopia

Plate 16b. Road side ponds to recharge groundwater and enhance in-situ moisture in soils, Tigray, Northern Ethiopia

Plate 16c. Road side ponds to recharge groundwater and enhance in-situ moisture in soils, Tigray, Northern Ethiopia

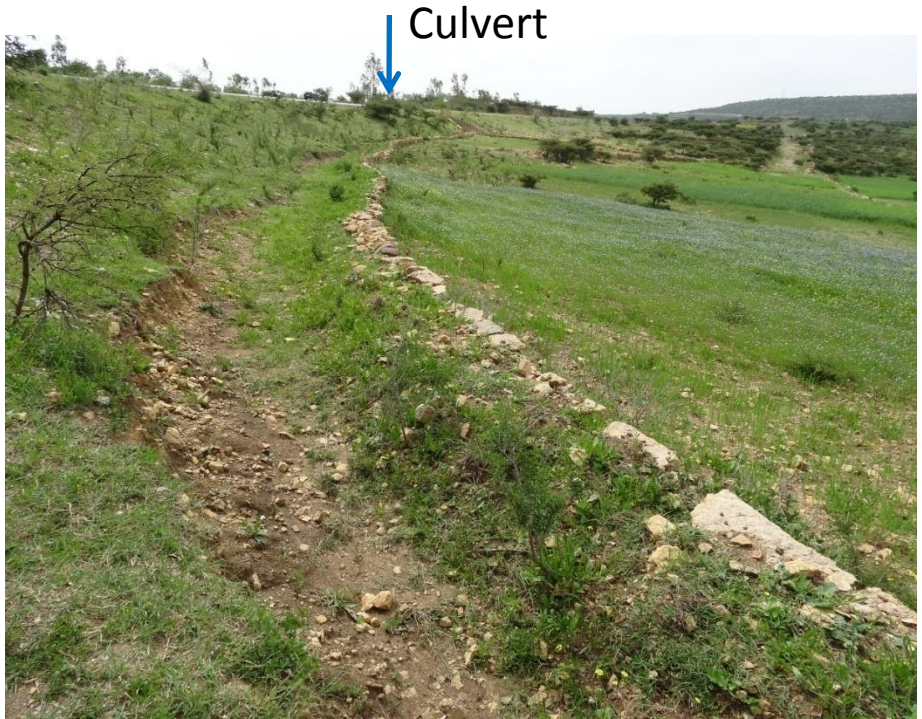
Plate 17. Road side runoff diverted into ponds in Tigray, Northern Ethiopia

June 2014

Plate 18a. Water from a culvert is channeled into farmlands with over 300m long trench, Tigray, Northern Ethiopia

Sept 2014

June 2014



Sept 2014

Plate 18b. Water from a culvert is channeled into farmlands with over 300m long trench, Tigray, Ethiopia

June 2014

Plate 19. Water from a culvert is channeled into farmlands, Tigray, Northern Ethiopia

Sept 2014

Plate 20. Road side runoff is channeled into farmlands (as spate), Tigray, Northern Ethiopia

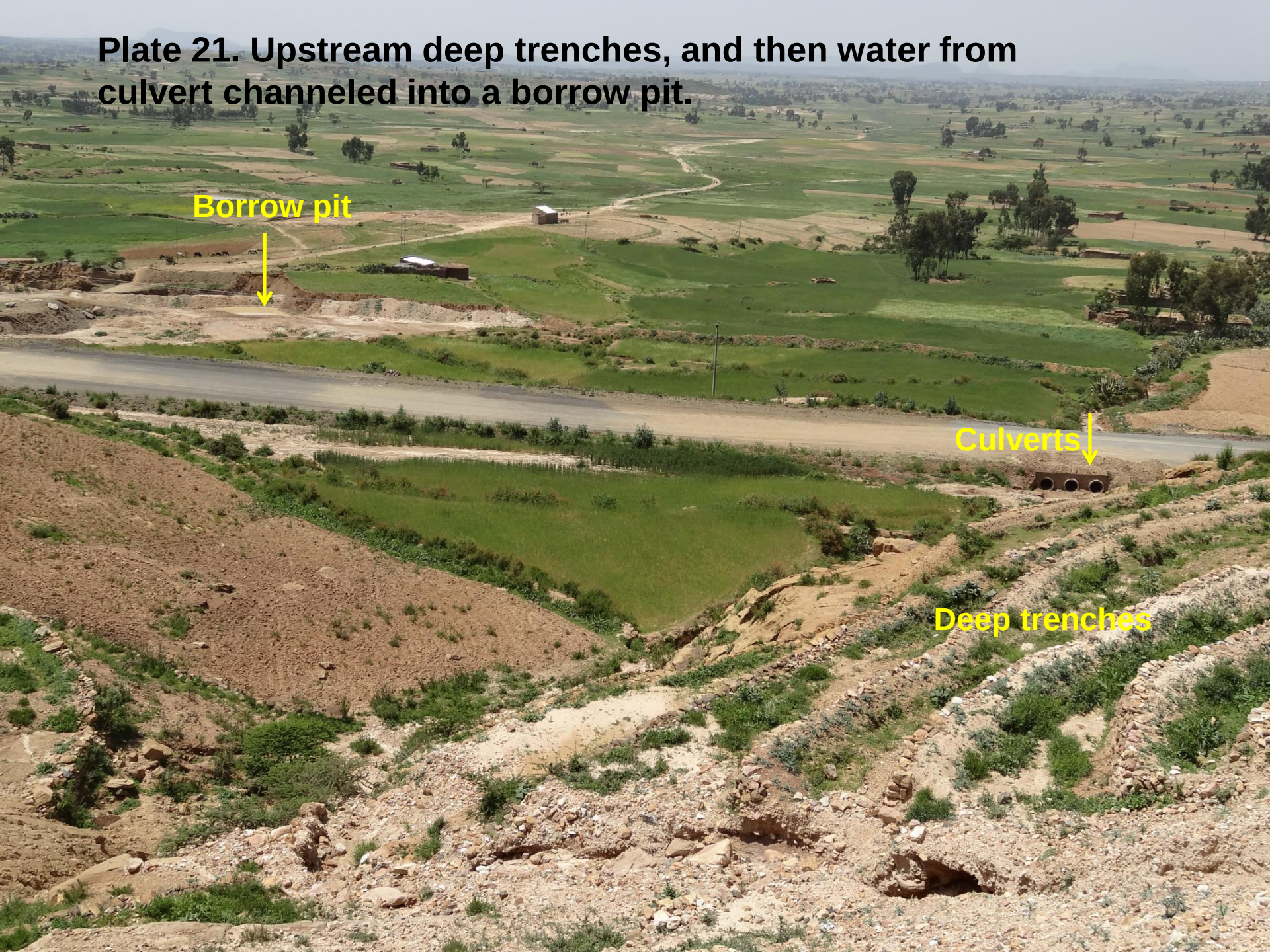


Plate 21. Upstream deep trenches, and then water from culvert channeled into a borrow pit.
Borrow pit
Culverts
Deep trenches

Plate 22. Borrow pit shown in plate 21

Plate 23. Panoramic view of channels constructed to divert water from culverts into a borrow pit shown in Plates 21, 22.

Plate 23. A pond used to store water from road side and from a culvert in Wukro area, Tigray, Northern Ethiopia

Plate 25. Water from a culvert which used to cause gully erosion is now channeled and spread into farmlands, Tigray, Northern Ethiopia

Plate 26. Road side runoff is diverted and spread into farm lands through series of channels, Tigray, Northern Ethiopia

Plate 27. Similar to Plate 26 but different site in Tigray, Northern Ethiopia