

not since 1910 to the present. The fact that the primary  
cause of the silting up of the ditch is the fact that the  
water is not kept running in the ditch at all times.

It is desired that you should be advised that  
efforts to prevent silting up of the ditch should be  
made at all times. The fact that the water is not  
kept running in the ditch at all times is the  
primary cause of the silting up of the ditch.  
Very truly yours,  
Mr. Harvey E. Meyer,  
Superintendent,  
Tuba, Arizona.

July 12, 1923

My dear Sir:

I have your letter of the 9th instant rel-  
ative to the silting up of your ditch, and asking whether  
I could send a man in to help you out in the matter, by  
showing you how to prevent the silting.

I am sorry but I have no one at present I can send  
in, but perhaps I can give you a few ideas by mail.

There is a waste way some 1300 feet from the head-  
gate and the floor of this spillway is lower than the  
bottom of the canal. At all seasons when the water in  
the stream carries silt, this spillway should be kept  
open a little all of the time, and daily should be open-  
ed up wide for a short time. This will keep the silt  
that comes in moving, and as it is heavier than the water  
it has a tendency to seek the bottom of the channel and  
be washed out of the waste gate instead of going on down  
the ditch. If the waste gate is left shut for a time it  
will silt the bottom of the canal full and then you will  
lose the advantage of the greater grade between the head-  
gate and that point which induces a greater current and  
takes out the heavier part of the silt at least.

When the ditch once silts full, the only thing to  
do is to get in and open up the channel with teams or  
shovels. If you can open up a small channel, however,  
and get the waste gate open and a current running through,  
then you can sluice out practically all of the silt and  
mud, if there is sufficient water in the stream to give  
you a head in the canal. The force of the water  
alone will not move the mud that has settled, but a few  
men with shovels can push down the banks, beginning at  
the waste gate and the water will carry out the mud and  
save you the heavy expense of dragging it all out on the  
bank.

The main thing, of course is to prevent it accumu-  
lating in the canal, and that can only be done by keeping  
the waste gate cleared out and some water running through  
it most of the time, or as long as you have any water you  
can waste, and a frequent sluicing out of the channel by

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running the full head of water out at that point for perhaps an hour or two daily aya time when you can spare it, such as at night when you may not be irrigating.

This instruction also applies to the project at Kayenta, where there has been a g eat deal of trouble and your predecessors and mein the field have pronounced the project almost a failure because they would not care for the waste gates and the sluicing out of the silt and allow it to accumulate until the entire ditch was filled.

I trust that you will get the point, and will be able to sluice out your ditch head an? then be abel to keep it cleaned out by the use of the water as indicated, and save much money and trouble which comes when the mud fills up the head.

Of course when the sily goes beyond the sluice gate there is nothing to do but clean the ditch. It is past the sluicing point.

When possible I will be pleased to send a man in to help you out provided this is not sufficient to show how to handle the situation.

Very truly,

Supervising Engineer,