



Northern Pacific Railway Company.  
Engineering Department Records.

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579

G.M.

March 22nd 1899.

C. S. Bihler, Esq.,  
Division Engineer,  
Tacoma, Wash.

Dear Sir:-

I send you herewith copy of letter from C. N Bliss  
Secretary to the Commissioner of Indian Affairs relative to the White  
River slide.

Permission was requested for authority to enter upon the  
Reservation for the purpose of rectifying the channels and restoring  
the normal condition of flow. This is not directly passed upon, but in-  
directly it appears that, if any joint arrangement can be made, where  
by the matter can be determined by the two communities, or under the  
laws of the State of Washington, or by the appointment of some engineer  
or suitable person by the respective ~~parties~~ County Commissioners,  
"the Department will render every possible assistance within its auth-  
ority". I am personally of the opinion that the Commissioners of  
Pierce County should take all necessary action, in order to bring the  
matter to a head, as it is not probable that they will be restrained  
or interfered with in any manner by the government, and an adjustment  
will be secured in this way.

I do not think it best for the Railway Company to appear as

2.C.S.B.

a principal party, although its aid and backing should be extended to the Commissioners.

Yours truly,

(Signed) E. H. McHENRY.

Chief Engineer.

Enc.



1271  
NORTHERN PACIFIC RAILWAY COMPANY,

LEGAL DEPARTMENT.

BRITTON & GRAY,  
Washington Counsel.

PACIFIC BUILDING, WASHINGTON, D. C.,

A.B.

December 10, 1898.

C.W. Bunn, Esq.,

General Counsel N.P. R'y Co.,

St. Paul, Minnesota.

Dear Sir:-

Referring to previous correspondence on the subject of securing permission from the Secretary of the Interior to remove landslide from the White River on the Muckleshoot Indian Reservation, we now enclose communication from the Commissioner of Indian Affairs, dated December 8th together with copy of the letter from the Secretary of the Interior, dated November 25th, therein referred to. These papers are merely confirmatory of the previous advices which we have sent you with reference to the Secretary's position in this matter.

Yours truly,

*Britton Gray*

Enc.

*Mr McHenry*

*Pls note attached decision of Secy. I don't see what authority we have to go on reservation to change channel.*

*CWB*



in reply to the following:

Land  
53561-98

182  
Department of the Interior, *EF*

OFFICE OF INDIAN AFFAIRS,

WASHINGTON, December 8, 1898.

Messrs. Britton & Gray,

Attorneys-at-Law, Washington, D. C.

Gentlemen:

For your use and information this office encloses herewith copy of a decision rendered by the Secretary of the Interior November 25, 1898, in the matter of the petition of the Board of County Commissioners of Pierce County, Washington, for permission to enter upon the Muckleshoot Indian reservation in that State and to remove from the channel of White river the obstruction caused by a large portion of a high bank of the river sliding into the channel thereof. This decision fully explains itself and comment is unnecessary therefore by this office in the premises. The copy is transmitted to you at the request of the Secretary of the Interior.

Very respectfully,

*A. C. Donner*

Assistant Commissioner.

Hinton (G)

5234-1898.

DEPARTMENT OF THE INTERIOR,

Washington, November 25, 1898.

The Commissioner of  
Indian Affairs,

Sir:

Careful consideration has been given to the petition of the Board of County Commissioners of Pierce county in the State of Washington, for permission to enter upon the Muckleshoot Indian reservation in that State and to remove from the channel of White River the obstruction caused by a large portion of a high bank of the river sliding into the channel thereof.

It appears that for many years the waters of White River have divided at a point upon or near this Indian reservation, a part thereof flowing through Stuck River and thence by the Puyallup River into Puget Sound near Tacoma, and a part thereof flowing through White River to Elliott's Bay, an arm of Puget Sound near Seattle. A year or so ago, at a point on the Muckleshoot Indian reservation and near to, but below, the divergence of these rivers, a portion of the right bank of White River which is very high and precipitous, slid into the channel of the river, practically filling the same and causing the water to cut a channel from that point into Stuck River, thereby turning into the latter all the waters



usually carried away from the point of divergence by the two streams, thus overflowing the lands along Stuck River and doing great damage to property in that region. It also appears that neither of these streams is in itself sufficient to carry from the point of divergence the waters of the rainy seasons and flood times, and that overflows and destruction of property are only presented when the waters are fairly divided between the two rivers. Owing to the accumulations of debris and obstructions at the point of divergence and the changing channels, the waters have not been uniformly divided heretofore, and first one river and then the other has carried the major portion of the water, and has thus overflowed adjacent lands whenever rains or melting snows have increased the flow.

The petition of the Board of County Commissioners of Pierce county, is supported by letters and other communications from owners of property along the Stuck River. On the other hand, very earnest protests against the granting of the prayer of that petition have been filed by owners of property along White River below the point of divergence, and also by the city council of Seattle, the Chamber of Commerce of Seattle, the Board of County Commissioners of King county, and a meeting of farmers of White River Valley, held at Seattle, September 28, 1898. These protests strongly urge that this



Department "withhold all action in reference to the clearing of the river channels in the Muckleshoot reservation until a general scheme can be planned and adopted to the end that the waters of Stuck River and White River may be kept within their natural channels each carrying off its due proportion."

The papers submitted contain some statements and charges to the effect that the shifting of the river channels at the point where the two streams diverge, and a resulting unequal division of the water between the streams, has been influenced from time to time by the placing and removing of obstructions in the channels at or near the point of divergence. For instance, in the protest approved at the meeting of the farmers of White River Valley it is said:

For some 12 years past impediments to the flow of Stuck River have been wilfully placed therein by persons from Pierce county and many times have the trees and jams been removed, but for the past six years the obstructions were so massive that it was impossible for them to be removed by either artificial means or the flow of the river. The result was to divert nearly all the flow of Stuck River, thereby causing White River to be greatly surcharged and the stream to overflow its banks, the bridges destroyed, the farm fences demolished, and in some instances valuable farms as to wit: The Sharkey, Maddocks, and Neely places were greatly damaged, if not, as in the Neely farm, almost destroyed.

The county of King has suffered damage to the extent of thousands of dollars per annum, and the loss to farmers was greatly in excess to that of the county. This and all of this, owing to the illegal and unwarranted action of some of the residents of Pierce county.

At the point of divergence of said White and Stuck Rivers, the north boundary of White, is formed of a "bluff" some 400 feet high, almost perpendicular, covered with fir and similar timber in growth. The action of the great extra volume of water was so great as to

undercut the said "bluff", and last winter or early in the spring of 1898, a length of some 300 yards or more fell to the south and greatly obstructed White River, which at that point formed almost a quadrant of a circle, and caused the greater volume of water to run down Stuck River, all in consequence of the action of the Pierce county people.

While there has been no opportunity to sustain or refute these statements, they tend to show the state of feeling which exists in the two communities over the proper division of the waters of these rivers.

It is apparent that a controversy exists respecting the disposition and control of the waters of the two streams which this Department ought not to be called upon to settle or determine. The only way in which the Department is even remotely connected with the controversy is that the point where the streams diverge and the place of the slide are within the limits of an Indian reservation. The Department can not authoritatively ascertain and determine the true and natural location or relation of these channels, nor can it authoritatively say what will constitute a fair and equitable division of the waters in question between these two rivers. While the injury which has occurred is greatly to be regretted, as is also the controversy which has arisen, this Department is without responsibility for either nor is it clothed with authority to rectify the injury or adjust the controversy. If the two communities can agree upon some method of making a fair and equi-



table division of these waters, or if under the laws or authority of the State of Washington the matters of difference can in any way be adjusted or determined, or if the two communities, represented by their respective boards of county commissioners, can agree upon some engineer or other suitable person to superintend the opening of the channel of White River at the place where the slide occurred, this Department will render every possible assistance within its authority.

You will give due notice hereof to the parties in interest.

Very respectfully,

C.N.Bliss,

Secretary.



# Northern Pacific Railway Company.

Office of the Chief Engineer.

E. H. MCHENRY,  
CHIEF ENGINEER

St. Paul, Minn.

December 1st 1898.

C. W. Bunn Esq.,  
General Counsel,  
Building.



Dear Sir,-

Returning herewith letter of Britton & Gray of November 28th, relative to White River slide on Muckleshoot Indian Reservation, this matter is liable to prove a very serious one for us, and as we seem to be unable to get any assistance from the Department, I suggest for your consideration that the Railway Company could enter the Reservation for the purpose of doing the necessary work of closing the new channel. This would doubtless involve an injunction suit and the trial of the case on its merits. There seems no other alternative. The new channel of the White River will not be deepened or interfered with in any manner by the proposed work. You will understand that the obstruction to the original channel, ensuing from the objectionable slide causes the river to break out over its banks and to cut out a new channel. I would propose to close this new channel, using proper means to help the water to resume its original channel.

Please advise if you concur, and I will instruct Mr. Bihler accordingly.

Yours truly,

*E. H. McHenry*  
Chief Engineer.

1271  
NORTHERN PACIFIC RAILWAY COMPANY,

LEGAL DEPARTMENT.

BRITTON & GRAY,  
A.B. *Washington Counsel.*

PACIFIC BUILDING, WASHINGTON, D. C.,

November 28, 1898.

C. W. Bunn, Esq.,

General Counsel N. P. Ry. Co.,

St. Paul, Minn.

Dear Sir:-

Referring to your communications of August 30th and October 24th, relative to the White River slide on the Muckleshoot Indian Reservation, we advise:-

During our early discussion of this question with the officials in the Interior Department, we were met with the very decided opposition of parties in King county, who placed themselves on record with all sorts of objections against the proposed removal of the slide from White River. It was charged that the slide had been caused by obstructions placed in the Stuck River by people in Pierce county. That Pierce county officials did not so much desire to remove the present obstruction as they did to so deepening the channel of the White River as to cause the entire flow of water to pass through that channel, leaving the Stuck River practically dry, and finally that the Secretary of the Interior should not lend himself to assist in the efforts of one community when opposed by the decided sentiment of the adjoining county.

The Secretary did not hesitate to state his embarrassment in considering the question, and suggested that the entire matter should be referred to the Governor of the State for solution. Not knowing what position the Governor would take, we opposed this proposition,

suggesting that inasmuch as the Secretary had sole jurisdiction over the Indian reservation, he could not consistently refer the matter to the Governor, with the hope of an effective remedy being found in that direction.

The Secretary recognizes that the interests of the Northern Pacific company should be protected, and, as explained by us, that the company had no other desire than to see a proper proportion of the water run through both rivers, in order that its tracts and bridges might not be overrun and carried away by either stream. He feared, however, that he might be lending himself to an effort of the people of Pierce county in so deepening the channel of White River as to effect the divergence of all the water to that stream. We suggested that this result could be avoided by his approval of the application of Pierce county, subject to the limitation that the slide should only be removed to the extent of the former channel of the river, and the work to be done under the supervision and control of an engineer to be agreed upon by the county commissioners of both Pierce and King counties.

He has finally announced his views, and concludes that the Department is not at all responsible for the present situation of affairs, nor for the feeling of extreme hostility disclosed upon the part of the people of both counties, and while he regrets the incident and existence of such feeling, he cannot believe himself responsible for the same nor does he desire to lend his efforts in continuing the existing of such feeling. He states his recognition of the necessity for keeping an equal flow of water through each stream, but because of his lack of knowledge as to where the former channel of the White River was, and of his lack of means to enforce any compliance with restrictions



which might be placed upon the work, if done by the Board of Commissioners of Pierce County, he is not willing in the present situation to give his permission for the removal of the slide. He suggests, however, that if the county commissioners of Pierce and King counties can reach the agreement, or that there is any means of accomplishing the result through State officials, or if the people will agree to have the work done under the supervision and control of an engineer to be agreed upon, he will readily lend his assistance to the desired result and grant his permission, when any of these suggested courses have been adopted by the people interested.

We believe that the most ready solution would be to have the Boards of the two counties agree upon an engineer, under whose supervision the work was to be done, and such appointment be returned to the Secretary of the Interior, with renewed request for his allowance of the pending application.

We will forward you a copy of the Secretary's conclusions tomorrow or next day.

Yours very truly,

*Britten Gray*

1271  
October 24, 1898.

Messrs. Britton & Gray,

Washington, D. C.

**COPY**

White River Line.

Gentlemen:-

Referring to your letter of October 11th regarding above matter, I beg to advise you I submitted the same to our Chief Engineer and am in receipt today of a letter from him a copy of which I enclose herein.

Yours truly,

*W. H. R. R. R.*  
General Counsel.

(Enc)

# Northern Pacific Railway Company.

Office of the Chief Engineer.

E. H. McHENRY,  
J-M CHIEF ENGINEER.

St. Paul, Minn.

On Line, October 19th, 1898.

Subject: White River slide.

C. W. Bunn, Esq.,  
GENERAL COUNSEL,

Dear Sir:--

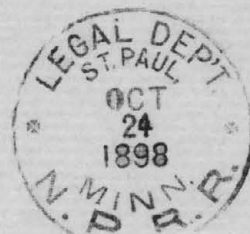
I have noted and return herewith letter of Britton & Gray of October 11th, concerning the White River slide. I am disappointed in the failure of the Inspector to make a recommendation. The matter seems to me to be particularly clear, as it is not a question of altering or modifying the former flow of the river, but simply restoring it. If the trouble caused by the slide is rectified, then the same quantity of water will flow in the old channel as before. If nothing can be done to restore the old channel, considerable damage to our bridges is likely to ensue, as they are only proportioned for the normal flow of the Stuck River, which carried about one third of the total flow of the White River above the inlet.

Yours truly,

*E. H. McHenry*  
Chief Engineer.

Enclosure

*File*  
*Write say to B. G. that I inclose*  
*three copy of this letter - send*  
*Copy* *CWB*





NORTHERN PACIFIC RAILWAY COMPANY,

LEGAL DEPARTMENT.

BRITTON & GRAY,  
Washington Counsel.

PACIFIC BUILDING, WASHINGTON, D. C.,



A.B.B.

White River Slide.

October 11, 1898.

C.W. Bunn, Esq.,

General Counsel N.P. R'y Co.,

St. Paul, Minnesota.

Dear Sir:-

Noting your favor of the 30th of August, with enclosures, and our reply of September 21st, we advise

The report of the inspector has been received without making any recommendation. He gives at length the facts on both sides of the controversy, and raises, in the view of the Department here, a serious question. In effect, he says it is a shot-gun case; that the Seattle people are backing one set, and the Tacoma people another set; some people, whose lands would have been relieved from the waters of the river by this slide, are backed by the authorities of Kings' County, and the people whose lands are injured by additional waterflow caused by this slide, are backed by the authorities of Pierce county. The Inspector further states that the people of White River of Kings' County side threaten an injunction upon an attempt to do the work proposed by the Pierce County authorities. In this situation we can only urge upon the Department that they assent to the doing of the work, provided the lower tribunals of competent jurisdiction determine that it can properly be done.

yours truly,

*Britton Gray*

*E.K.M.ck*  
*pls note*  
*return to W.B.*  
*C.W. B*  
*Adm*  
*5/1/91*

1271  
NORTHERN PACIFIC RAILWAY COMPANY,

LEGAL DEPARTMENT.

BRITTON & GRAY,  
Washington Counsel.

PACIFIC BUILDING, WASHINGTON, D. C.,

A.B.B.

September 22, 1898.

C.W. Bunn, Esq.,

General Counsel Northern Pacific R'y Co.,  
St. Paul, Minnesota.



Dear Sir:--

Referring to your favor of August 30th with enclosures relating to the desire of the County Commissioners of Pierce County, Washington, to restore the channel of White River, we advise that the Indian Office report to the Secretary thereon that protest was made by the authorities of Kings County thereto upon the suggestion that it would result in a diversion of the waters of the river for the benefit of Pierce County, and to the injury of Kings County, whereupon the secretary of the Interior has referred the matter to Inspector Walter H. Graves, who is now about proceeding to the ground to make personal inspection and report.

Yours truly,

*Britton Gray*

*C. H. McHenry*  
*Please note return*  
*9/26/98*  
*C. W. Bunn*  
*note*  
*5/14/99*

1271  
NORTHERN PACIFIC RAILWAY COMPANY,

LEGAL DEPARTMENT.

BRITTON & GRAY,  
Washington Counsel.

PACIFIC BUILDING, WASHINGTON, D. C.,

A.B.B.

September 3, 1898.

Mr. C. W. Bunn,

General Counsel N. P. Ry. Co.,

St. Paul, Minn.



Dear Sir:-

We receive to-day your favor of the 30th ultimo, enclosing papers on the subject of slide in the White River, on the Muckleshoot Indian reservation. We note that the County Commissioners of Pierce County, Washington are willing to do the necessary work to restore the channel to its condition prior to the slide, and petition the Secretary of the Interior for authority therefor. We will keep watch of the matter and do all in our power to secure the secretary's proper action upon the request.

Yours very truly,

*Britton Gray*

*6 MB.  
Noted  
9/22  
H. M. G.*



1271

August 30th, 1898.

Subject:- White River slide.

Britton & Gray, Esqs.,

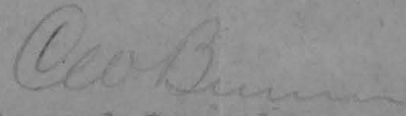
Attorneys at Law,

Pacific Building, Washington, D.C.

Dear Sirs,-

I enclose you file of papers just received by me from the chief engineer relating to slide in the river called the White River. This slide is on the Muckleshoot Indian Reservation. The river divides its waters, part going to Seattle and part to Tacoma: by the slide the water is being diverted towards Tacoma, which will seriously endanger the bridges and structures of the Railway Company when the water is high and will cause large amount of damage to farmers. It appears that the board of county commissioners of Pierce County are willing to do the work necessary to restore the channel to its condition anterior to the slide, and will send a petition to the Secretary of the Interior authorizing ~~the~~ them to do this. We would like to have the petition granted. Will you kindly aid the matter in every way possible and when you are through with the enclosed papers return them to me.

Yours truly,

  
General Counsel.

B-R encls











# Northern Pacific Railway Company.

Office of the Chief Engineer.

E. H. McHENRY,  
CHIEF ENGINEER.

J-M

St. Paul, Minn.

August 29th, 1898.

Subject:-- White River slide.

C. W. Bunn, Esq.,

GENERAL COUNSEL,

Dear Sir:--

Please note the enclosed correspondence concerning the diversion of a large portion of the flow of the White River into the Stuck River, occasioned by a slide as shown in the sketch accompanying the papers. This is a matter of considerable importance, as, unless steps are taken to rectify the trouble, the major portion of the White River will be diverted down the Stuck valley towards Tacoma. Our present bridges are inadequate and may be washed out, and in addition great damage to the farming lands will be incurred. As this obstruction occurs on the Muckelshoot Indian Reservation, it is quite impracticable for the Railway Company to attempt the rectification, and undesirable as well, as grave questions have arisen in past years as to the proper division of the flow, by way of the White River towards Seattle and the Stuck River towards Tacoma, and no result which the Railway Company might reach would be satisfactory to the farmers and land owners in one or the other of the two valleys. Recognizing this, I suggested to Mr. Bihler that the work be done by the County Commissioners, <sup>under</sup> and the authority of the Secretary of the Interior secured, in order to rectify the trouble, and that any sum which the Railway



C. W. B? -2-

Company expended should take the form of a contribution towards the cost of this work, under the County Commissioners.

You will note by the attached telegram that Mr. Bihler suggests that influence be exerted to secure the prompt action of the Secretary of the Interior. If in your judgment such action is necessary or expedient, kindly give the matter your attention.

Yours truly,

*W. H. Hanning*  
Chief Engineer.

Enclosure

Pioneer Press  
Superfine

# TELEGRAM.

## NORTHERN PACIFIC RAILWAY COMPANY

All Railroad Messages must be written in ink on these blanks, which must not be used for other purposes, and those for parties on trains (except trainmen) enclosed in sealed envelopes. The exact time sent, time received, personal signal of sending and receiving operators, call of sending office and name of receiving station must be entered in proper spaces in every instance.

After transmitting telegrams which in their judgment would have served the Company's interest as well if sent by train mail, or which appear unnecessary long, operators are required to attach a copy to Form 238, and forward same to Superintendent of Telegraph.

NUMBER	REC'D FROM	SENDER	RECEIVER	TIME REC'D	DATE REC'D	TIME FILED	NUMBER	SENT TO	TIME SENT	SENDER	REC'D
477	lin	a w	938	M.							

FROM Tacoma TO E H McHenry

DATED Aug 26 1898 AT

Re my letter  
of 23rd inst re white river slide Pierce county  
Commissioners will send petition allow  
tomorrow requesting permission to do work  
influence should be exerted to secure  
Nicholas Tomahawk  
prompt action

C. S. Biles



# Northern Pacific Railway Company.

CHAS. S. BIHLER,  
DIVISION ENGINEER.

Engineering Department.

Office of Division Engineer, Western Division.



IN YOUR REPLY  
PLEASE REFER TO  
S 3729.

Tacoma, Wash., Aug. 23, 1898.

Mr. E. H. Mc Henry,  
Chief Engineer,  
St. Paul, Minn.

Dear Sir:-

I hand you herewith, correspondence regarding the slide at the junction of the White and Stuck rivers, and send, under separate cover, two prints of plat showing the situation.

You will note that the slide is on the Muchelshoot Indian Reservation, and it will consequently be necessary to secure the consent of the Interior Department, before any work can be done.

I have requested Commissioners of Pierce County to obtain the consent of the Interior Department, to enter upon the reservation and do the work necessary to restore the original conditions, or, what would be better, have the work done by the Government, so as to prevent possible interference from the residents of King County, saying that the Railway Company would co-operate with the County in the matter.

It would be better to have the work done by the Government, and to expedite matters, I would suggest that our Attorneys at Washington, D. C. be advised to lay the matter before the Department and ascertain proper procedure to take.

E. H. Mc H.

-2-

If something is not done before the fall floods, considerable more damage will ensue to the farms along Stuck river, and our bridge and embankment at the crossing of that stream will be endangered.

Yours truly,

*Chas Bihler*

Division Engineer.

RH. Enc.

*Please return correspondence*

**Northern Pacific Railway Company.**

Crowley &amp; Grosscup,

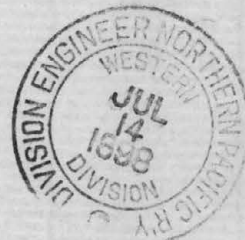
Division Counsel.

Dictated by Grosscup.

Tacoma, Wash.

July 14th, 1898.

Mr. Chas. S. Bihler,  
Division Engineer,  
Building.



Dear Sir:-

SUBJECT: Opening channel Stuck river.

We have examined the attached correspondence, from which we infer that slides on the White river below the junction of the Stuck are so obstructing the channel of White river as to cause a unaccustomed flow of water through Stuck river, thereby endangering the railroad bridges and track. We assume that the same cause will result in damage to farms, and also to county roads and bridges. The county commissioners of King County would be justified in co-operating with you to remove the cause of this threatened danger, for the protection of county roads and bridges. If our assumption is correct, we think that the matter should be taken up with the board of county commissioners of King County as early as practicable, and an agreement arrived at if possible both as to the plan of averting the threatened results and also an apportionment of the expense. Messrs. Donworth & Howe, our counsel at Seattle, will co-operate with your department in whatever is desired in this connection. Enclosed files.

Very truly yours,

*Crowley & Grosscup*

Division Counsel.

Enc.



# Northern Pacific Railway Company.

8.3729

Assistant General Superintendent's Office.

W. G. PEARCE,  
ASST. GEN'L SUPERINTENDENT.

On Line, July 8, 1898.

Opening Channel, Stuck River:

Mr. C. S. Bihler,

Division Engineer,

Tacoma, Wash.,



Dear Sir:-

Yours of July 2nd duly received. I have talked with the General Manager. He approves your taking up the matter with the County authorities on the lines suggested in your letter.

I suggest that you confer with Crowley & Grosscup before proceeding with the matter, and if it is practicable to do so I will be glad to have you submit to me before finally closing it the arrangement which you conclude will be advantageous to be made with the County. I return the enclosures.

Yours truly,

*W. G. Pearce*  
Ass't Gen'l Supt.

Enc.

83729

S-3729.

Tacoma, Wash., July 2, 1898.

Mr. W. G. Pearce,

Ass't Gen'l Sup't, Building.

Dear Sir:-

Referring to yours of 27th, I beg to hand you herewith report from Resident Engineer concerning condition at the source of Stuck river. It will be necessary to take some action towards restoring the original conditions, otherwise there is danger that our bridge at the crossing of Stuck river will be insufficient to carry the water at flood stages. It is quite possible that the accumulation of drift below the narrow channel, which is all that is left of White river, may, during the next flood, entirely close this opening, bringing the entire volume of White river to our Stuck river crossing. The situation is rather difficult, as the interests of the inhabitants of White and Stuck river valleys are opposed to each other, and considerable resistance may be encountered on the part of the White river valley people if any attempt is made to modify the quantity of water which goes down the White river. For this reason I believe that the County authorities should be induced to take the necessary action, and that the Railway company should, and could afford to, contribute quite liberally towards the expense of opening a new channel, and, if possible, to provide, by establishing a staple cross-sections for each of the rivers, a proper division of the water. If you agree, I will take the matter up with the County authorities on these lines.

Yours truly,

BM Enc

Division Engineer

## Northern Pacific Railway Company.

S. 3729

Tues June 27<sup>th</sup> 98

Mr. Chas. D. Bihler

Sir, Eng.

Dear Sir--

Herewith as per your request report of condition of Junction of Truck and White River.

The slide which occurred here some times last winter begins about 150 feet west of mouth of new channel as seen in photo #1 and extends for about 500 feet downstream. It started to slide about 90 feet above the present water level of the river and extends backward for about 500 feet, the total area comprises about 6 or 7 acres. The backwall where slide broke off is perpendicular for 100 ft or more and the amount of earth which still seems to be sliding or probably will be during the wet season is 60 feet or more in the background and tapers off to about 15 feet in the foreground above river where slide started.

The material is of a medium coarse gravel mixed with clay and when water-soaked is of the kind that will slide very easily. The rumor of the ranchers in the white river valley shooting down the bluff I give no credulity as no rancher could furnish enough powder to move such an immense amount of earth.

About 90 feet above the river there seems to be a layer of



## Northern Pacific Railway Company.

#2

blue clay which is exposed in several places and on which the material above seems to be sliding. Below this the original gravel sidewalk nearly perpendicular, is still intact except in one place and by far the largest part of the slide has come from above.

However I cannot tell for sure if this strata of clay is the exact cause as it is only exposed at a few places and I cannot say whether it runs through the whole face of the bluff, but it seems to me a very plausible theory.

At one place as shown on photos #2 & #5 quite a large amount of earth has also slid out of the original sidewalk the only place where this has occurred. The material below this is very wet and mixed a great deal with blue clay. About a 2 inch stream is flowing down here and it makes its appearance through the gravel. The dirt that has slid here seems to be washed very much and indicates or that considerable water has come from above at some time or other.

The probability of further sliding seems to be better than ever and I should not be surprised if the whole of the white river channel be closed during the next wet season. If no further slides should occur, there still seems to be great danger of channel eventually closing up by driftwood.

## Northern Pacific Railway Company.

#3

There is one small and one large Log Jam collecting now, the smaller one at the mouth of the new channel and the larger one west of the slide as you can see respectively in photos #1 and #3.

The driftwood as it is now, will take a straight shoot down White River, not having sufficient room to turn at the mouth of new channel and on account of the narrowness of white river channel will undoubtedly collect there. The lower Jam or more has collected there during the last high water as I am told, there being not sufficient water there after passing slide when channel again spreads to its original width to float the drift.

This Jam has now nearly reached up to the slide and will help eventually to close up channel altogether. At one place there has a large cottonwood tree fallen across white river as you can see in photo #3 which alone would block and hold considerable drift before giving away.

As to the best method of protecting Shuck River from the whole of white River going down its channel I would suggest first of all the clearing and partially grubbing of land opposite slide for about 200 feet or more, so as to give White River all opportunity to cut a new channel.

## Northern Pacific Railway Company.

#4

and if allowed, too, close up new channel of Stuck River. This I think would answer the purpose providing no more slides should occur, but if the whole amount of earth now broken loose should come down I am convinced we would have to clear up further than distance mentioned. The land opposite slide is overgrown with very large cottonwood and alder trees, besides is full of old driftwood and river cannot wash out a new bed unless these obstructions are removed.

The new channel of Stuck is washing considerable and is now about 60 feet wide. I should judge that the amount of water going down Stuck River is at least 3 times as large as that of White River, however this varies considerably according to the height of the water. You will notice the swift current through new channel of Stuck River compared with White River in photo #1.

Very Resp.

Otto Hansen

Res. Engr.







# Northern Pacific Railway Company.

CHAS. S. BIHLER,  
DIVISION ENGINEER.

Engineering Department.

Office of Division Engineer, Western Division.

IN YOUR REPLY  
PLEASE REFER TO  
S-3729.

Tacoma, Wash., April 1, 1898.

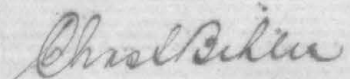
Mr. Otto Hansen,  
Resident Engineer,  
Tacoma.

Dear Sir:-

Please make survey and report on conditions at the place where the Stuck river leaves White river. I understand that White river below the outflow of Stuck has been obstructed by a slide from the bluffs, which causes more water to come down the Stuck than would naturally belong there. Note if there appears to be any liability of further sliding and further obstruction of the river, and as to the best method of protecting the beginning of Stuck river in such a manner as to counteract the conditions caused by the caving off of the bluff on White river.

Yours truly,

BM



Division Engineer.

1  
**Northern Pacific Railway Company.**

**Assistant General Superintendent's Office.**

**W. G. PEARCE,**  
ASST. GEN'L SUPERINTENDENT.

On Line, June 27, 1898.

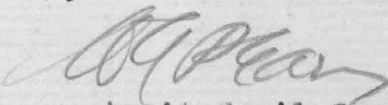
Examination of Confluence White and Stuck Rivers:

Mr. C. S. Bihler,  
Division Engineer,  
Tacoma, Wash ..

Dear Sir:-

Please note attached correspondence regarding the situation at the point at which the White River splits into the White and Stuck rivers. If you consider it advisable, it seems to me it would be well for you to have someone go to that point and examine the conditions. It may be that our interest requires action.

Yours truly,

  
Ass't Gen'l Supt.

Enc.



**Northern Pacific Railway Company.**

Office of the Division Superintendent.

Tacoma, Wash. June 2nd, 1898.

Mr. W.G. Pearce,

Ass't. Gen. Supt.,

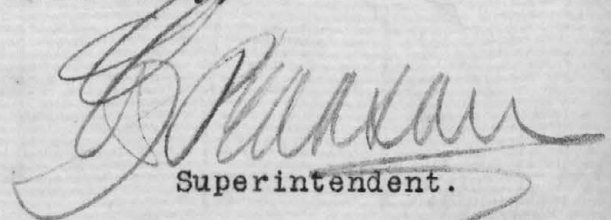
Tacoma, Wash.

Dear Sir:-

I beg to refer to you a report respecting the situation at the point of divergence of Stuck River from White River. During the recent past the flow of water through the Stuck River has been abnormal, while the flow through the White River has been proportionately less. This is partially attributed to the caving of a gravel bluff on the White River below the point of divergence, which obstructs the White River and forces a greater amount of water into the Stuck. A report of the previous examination was forwarded to the Division Engineer, with, I believe, a copy to you.

The situation at our crossing of the Stuck River is not encouraging, and it seems to me that it might be well to investigate the possibility of restoring the original situation at the point of divergence from the White River of the Stuck River.

Yours truly,

  
Superintendent.

## Northern Pacific Railway Company.

5  
 Tacoma, May 31, 1898.  
 DIVISION OF  
 SUPERINTENDENT

Mr. C. J. Pearson, Supt.,  
 Dear Sir:-

Complying with your request relative to looking up the condition at the head of Stuck River, I beg to state that I sent the same man who made the previous examination and he could find no recent change in the condition of affairs, except that the channel of the Stuck River at that point has deepened somewhat.

Yours Truly,  
 O. M. Osborne,  
 Supr. B. & N.



S-3729.

Tacoma, Wash., April 11, 1898.

Mr. Otto Hansen,  
Resident Engineer,  
Tacoma.

Dear Sir:-

Please make survey and report on conditions at the place where the Stuck river leaves White river. I understand that White river below the outflow of Stuck has been obstructed by a slide from the bluffs, which causes more water to come down the Stuck than would naturally belong there. Note if there appears to be any liability of further sliding and further obstruction of the river, and as to the best method of protecting the beginning of Stuck river in such a manner as to counteract the conditions caused by the caving off of the bluff on White river.

Yours truly,

BM

Division Engineer.



## Northern Pacific Railway Company.

Office of the Division Superintendent.

Tacoma, Wash., April 2, 1898.

Mr. C. S. Bihler,

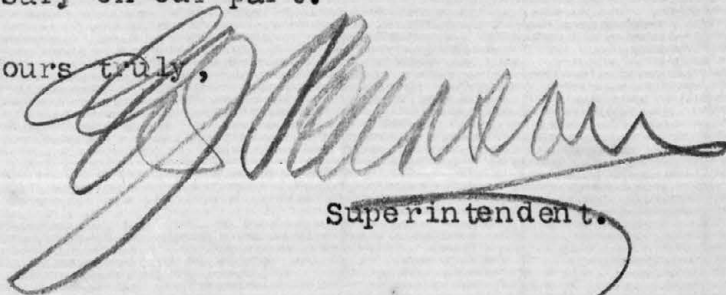
Division Engineer,

Tacoma.

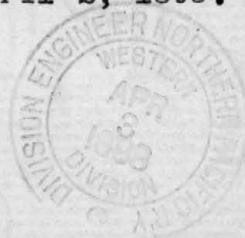
Dear Sir:-

From a report indicating an increase in the amount of water that has been diverted to the Stuck River recently, it seemed advisable to have an examination made of the point of divergence of this stream from the White River, a report of which I beg to hand you. As you are more familiar with the situation attending these two streams, namely: the Stuck and White rivers, I beg to ask your consideration and suggestions as to whether or not any precautionary actions are necessary on our part.

Yours truly,



Superintendent.



A3729

## Northern Pacific Railway Company.

Tacoma, April 1, 1898.

Mr. E. J. Pearson, Sup't,  
Dear Sir:—

Answering your letter of recent date relative to conditions existing at the junction of White and Stuck Rivers, I beg to state that I have had this matter looked up and find that the conditions are as follows: There has been a large land slide on the right hand side of White River, commencing a few feet below the junction of the two rivers, which has partially closed the channel and narrowed it to such an extent as to force the principal part of the water of White River into Stuck River. At the point where slide occurred, was an abrupt gravel bluff about 50 ft. high and which is now sliding off and forming a slope. There is every indication of this bluff continuing to slide, stopping up the channel of White River completely and forcing all the water through Stuck River.

There is no indication of any ditches having been opened or any other work having been done for the purpose of diverting the water in any way.

Northwestern Pacific Railway Company

Seattle, April 1, 1891

My dear Sir,  
I have the honor to acknowledge the receipt of your letter of the 27th inst. in relation to the proposed extension of the line of the Northern Pacific Railway Company from Seattle to Tacoma. I am very glad to hear that the project is being considered, and I am sure that the extension of the line will be of great benefit to the people of the region. I am sure that the project will be successful, and I am sure that the people of the region will be very glad to have the extension of the line. I am sure that the project will be successful, and I am sure that the people of the region will be very glad to have the extension of the line.

L. L.



E. J. P.

FORM 296

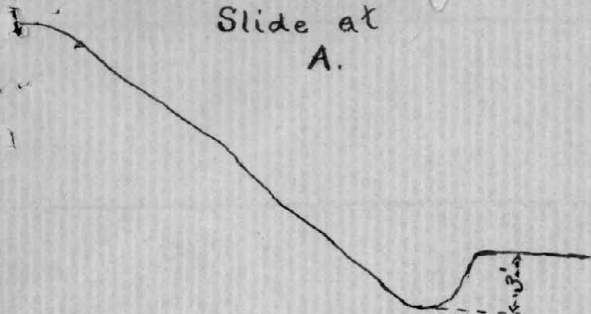
Northern Pacific Railway Company.

I think that the diversion of the water was caused by the land-slide which probably occurred last November.

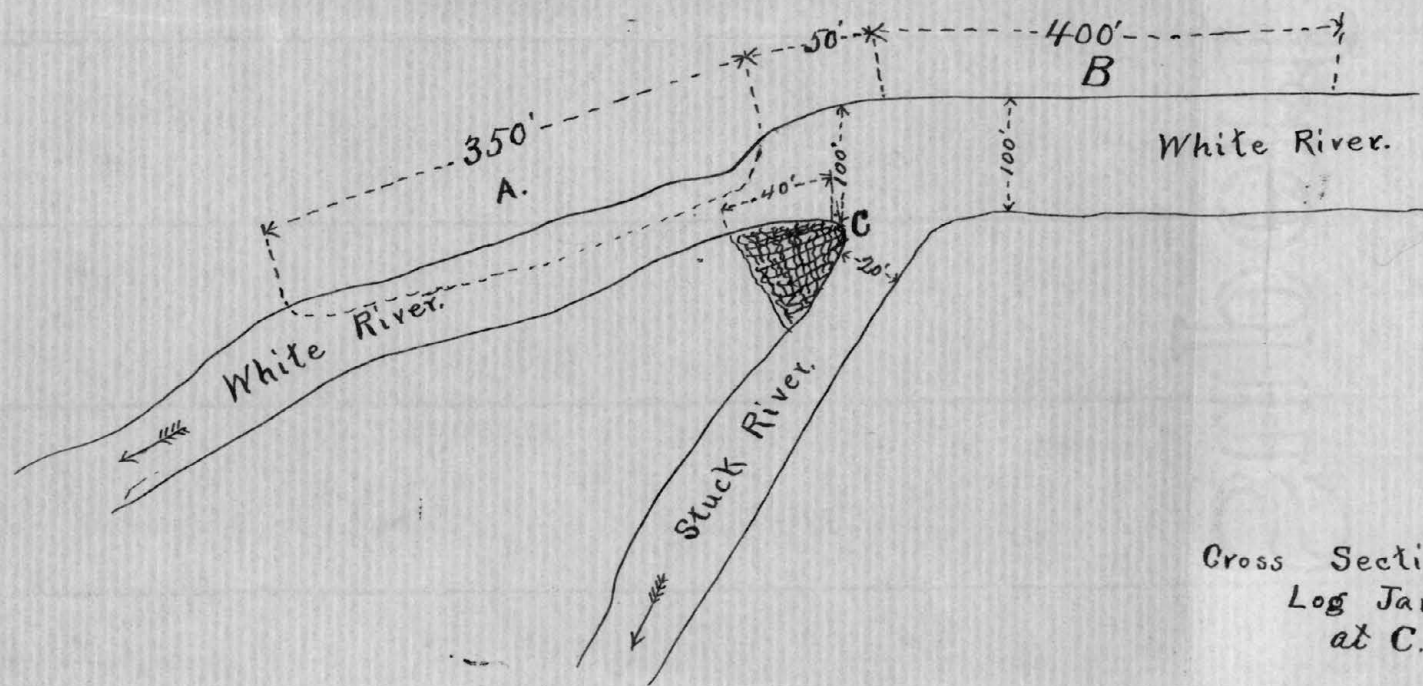
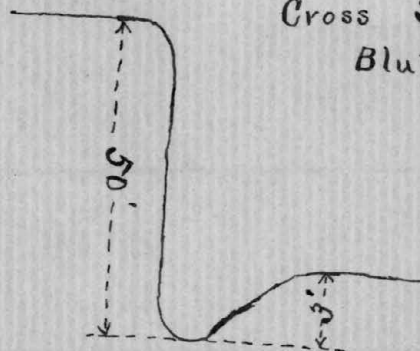
I attach a sketch showing the position at the junction of the two rivers.

Yours Truly,  
O. W. S. Leonard  
Supr. B. & N.

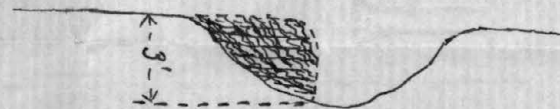
Cross Section of  
Slide at  
A.



Cross Section of  
Bluff at  
B.



Cross Section of  
Log Jam  
at C.



Dotted line indicates  
present river banks.

I

579