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October 1, 2005

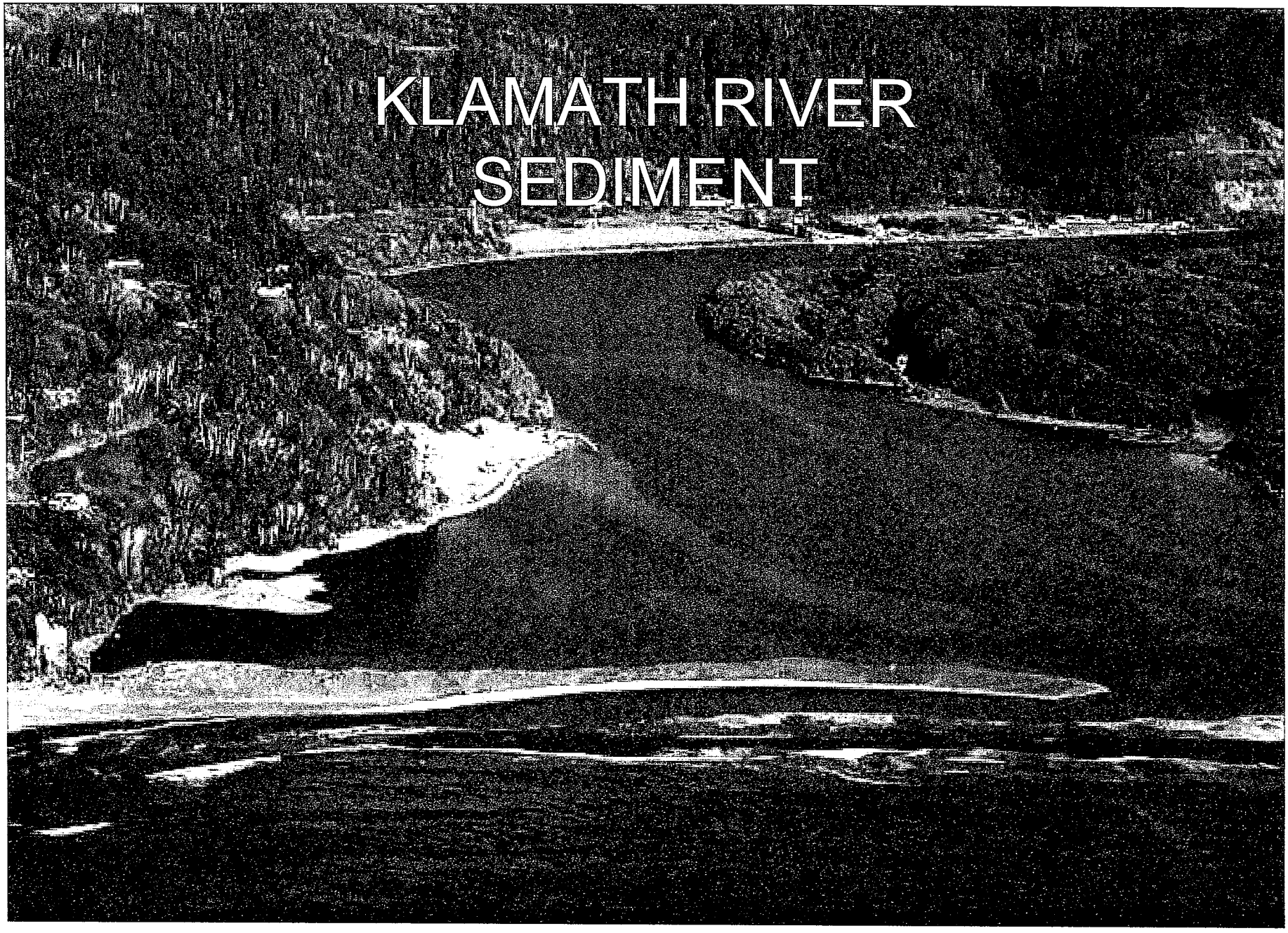
Craig J. Wilson, Chief
Water Quality Assessment Unit
Division of Water Quality
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

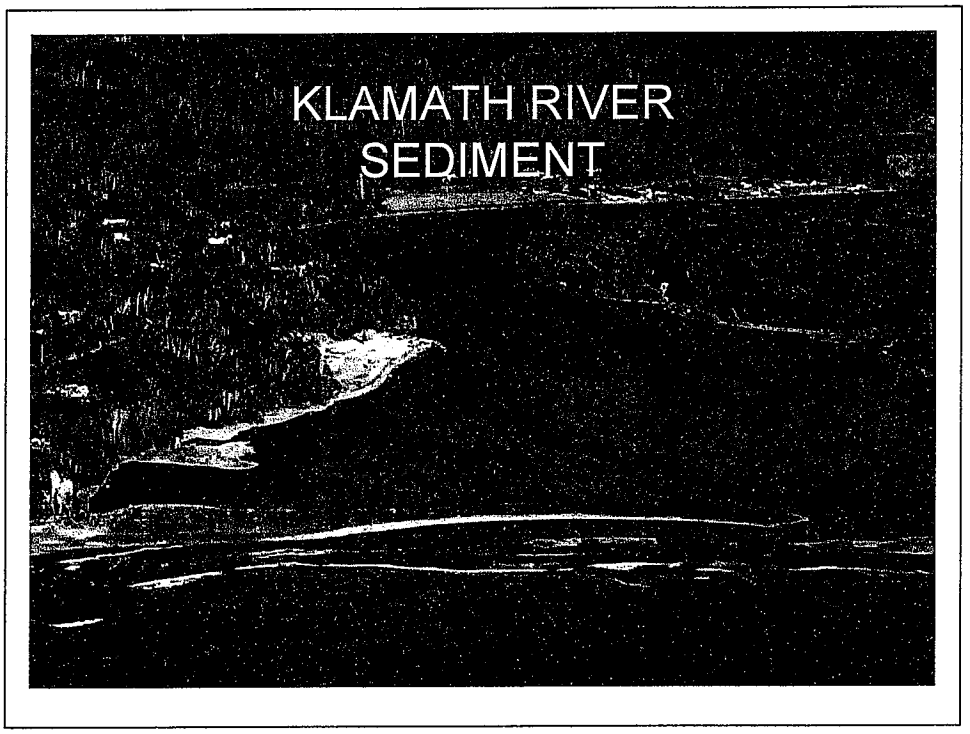
Dear Mr. Wilson,

I am enclosing a power point presentation for the December 6, 2005 303(d) hearing in Sacramento. I would like to have this included in the Klamath sedimentation written record, and would like to give the presentation at the December 6 meeting.

Thank you.

Denver Nelson


KLAMATH RIVER
SEDIMENT



KLAMATH MOUTH 2003

RIVER MILE 0

Most of the rivers of the California North Coast were placed on the first 303-D sediment impaired list in 1996. Amazingly the Klamath River has not been listed as sediment impaired in spite of sediment listing for the following Klamath tributaries: Scott, East Fork Trinity, South Fork Trinity, Lower Main Stem Trinity, Middle Main Stem Trinity and Upper Main Stem Trinity. The initial sedimentation listings were made on the basis of very little scientific data with notable exception of the Van Duzen River which has been studied for sediment since the 1950's. Now listings are supposed to be made on the basis of scientific data. There is very little good sediment data on most of the North Coast rivers including the Klamath. Instead of re-presenting the Klamath data, I have chosen to present historic and present day pictures of the Klamath River. These pictures show the build up of sediment and the effects this sediment has on the river and its inhabitants.

The State Water Board should list the Klamath River as sediment impaired.

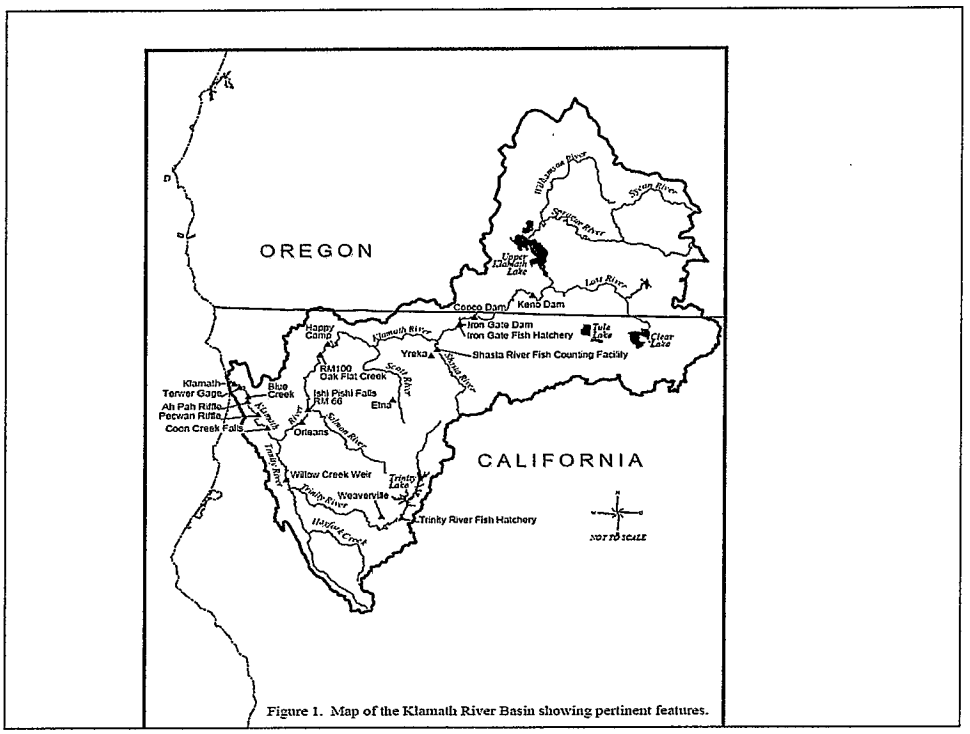
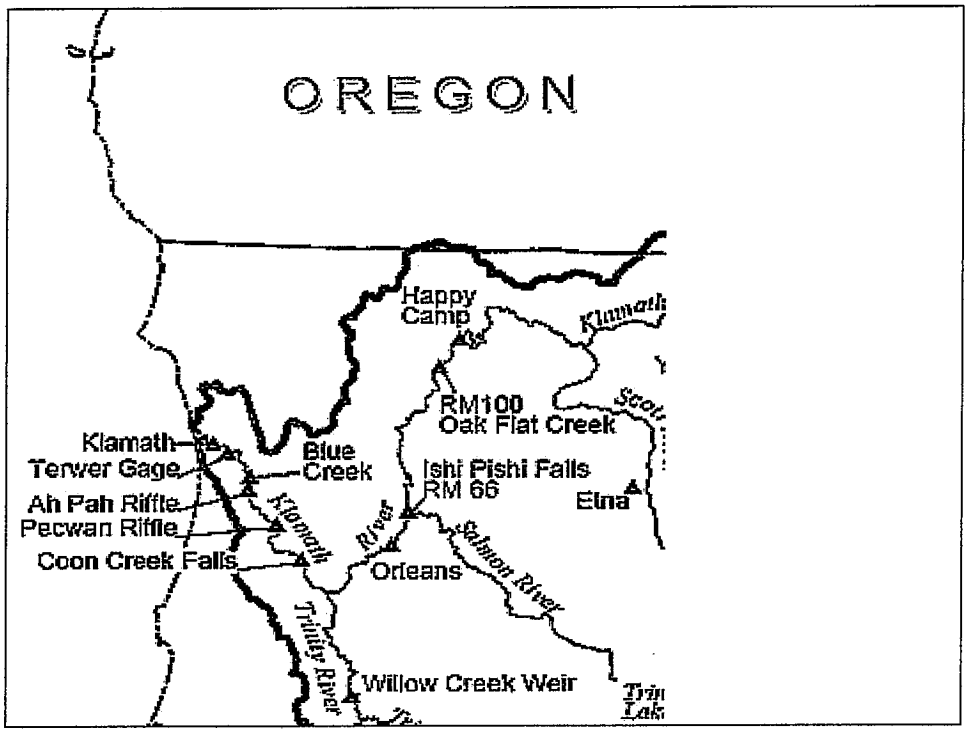


Figure 1. Map of the Klamath River Basin showing pertinent features.

KLAMATH BASIN MAP

The Klamath River flows 250 miles from Upper Klamath Lake to the Pacific Ocean. The Lower Klamath Basin begins below the Iron Gate Dam. The pictures that follow are from the lowest 36 miles of the river below the Trinity confluence. The next slide magnifies that area.



LOWER KLAMATH RIVER MAP

The following pictures are at the mouth, near the Terwer Gage, near Blue Creek, at Surpur Creek below Pecwan Riffle and immediately below Coon Creek Falls. The Trinity River joins the Klamath River 42 miles upriver from the Pacific Ocean at Weitchpec. Simpon and other private land owners now own 98% of the reservation.

The Yurok Reservation is a one mile corridor on each side of the river from the mouth to just above the Trinity mouth.

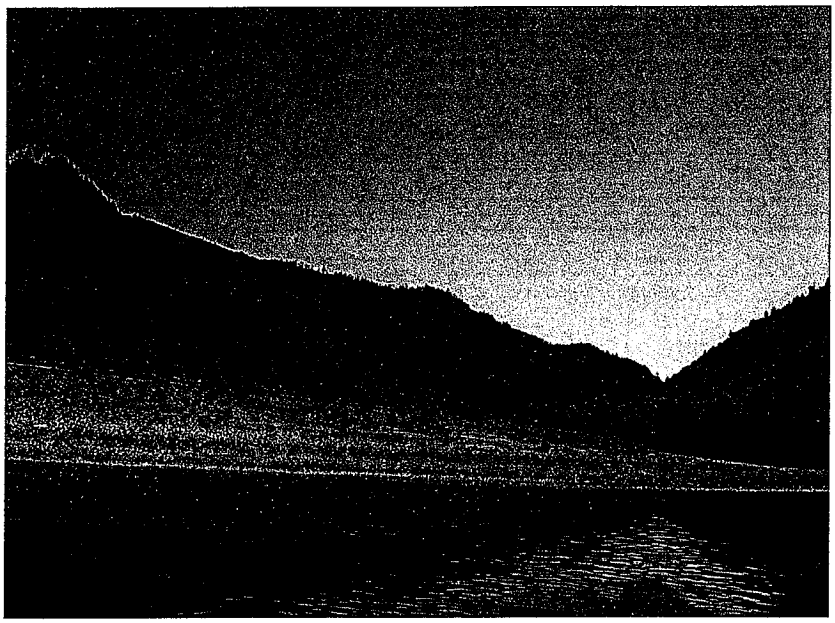
LOWER KLAMATH 1948

This 1948 aerial photo shows most of the lower river from the mouth to Surpur Creek prior to logging. The Yurok reservation extends from the mouth to the Trinity for one mile on either side of the river. The lower housing area at Klamath Glen was destroyed by the 1955 and 164 floods. The V-shaped river topography and steep cannon walls are well seen. A few years after this picture was taken, the Yuroks patented most of their reservation lands and logged or sold them to Simpson Timber Company which then logged them. Simpson is now logging this area again The second growth trees are 50 to 60 years old.

USGS KLAMATH GLEN FLOW GAGE 2004

RIVER MILE 8

This flow gage at Klamath Glen and the Terwer gage about one mile down river provide in stream flow measurements from 1911 to the present. From this point upriver for the next 20 miles the only access is by boat.



STARWEIN FLAT 2004

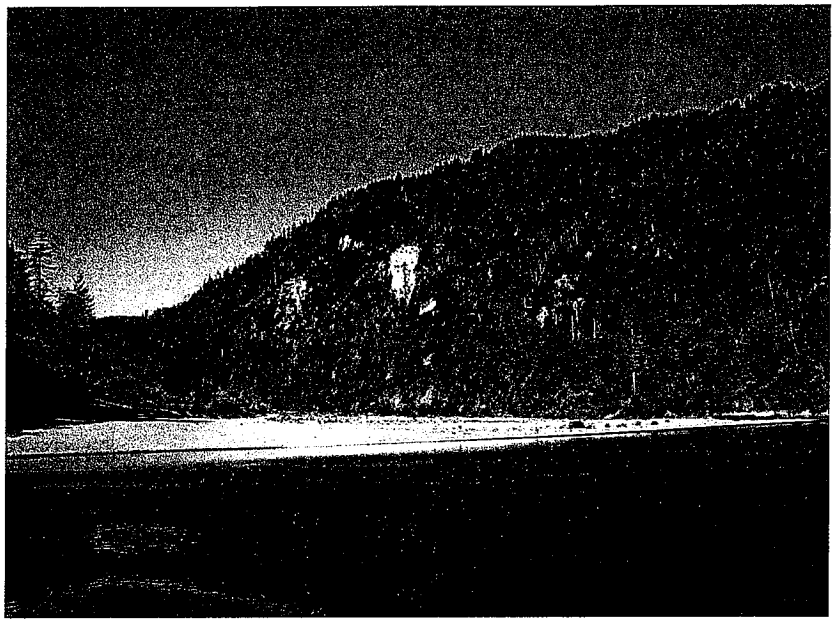
RIVER MILE 10

This 40 foot high bank of sediment was not here 80 years ago according to my old and departed Yurok friends and neighbors.

STARWEIN FLAT 2004

RIVER MILE 11

This view of Starwein Flats shows some wild cattle. They give a size perspective to these acres and acres of sediment.



LAND SLIDE BELOW BLUE CREEK 2004

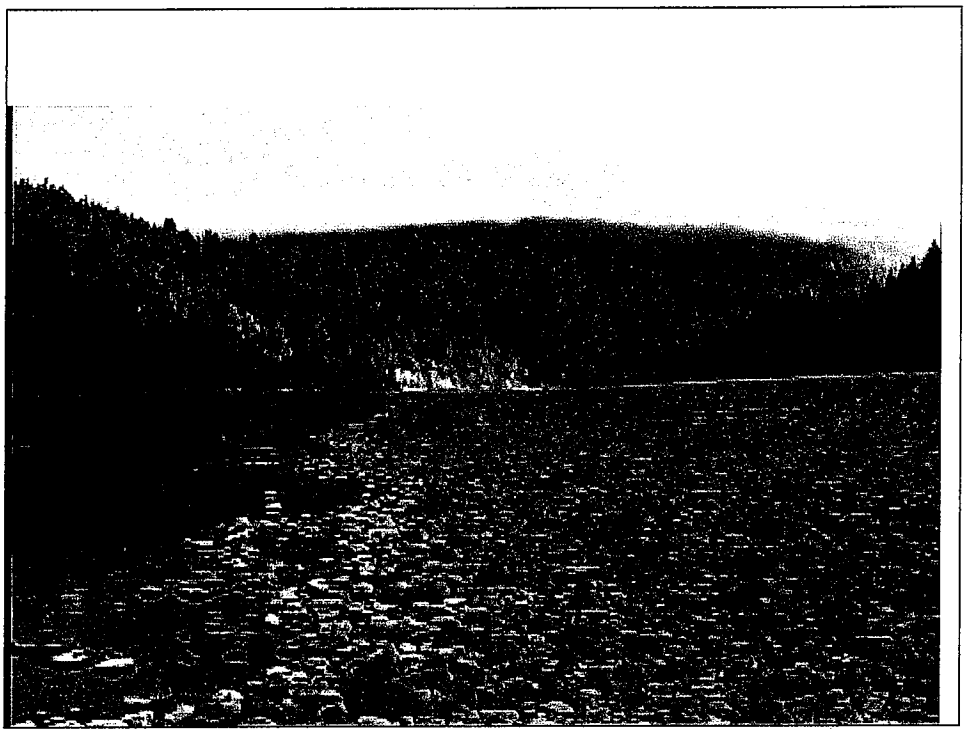
RIVER MILE 15

The ridge is 1000 feet above the river; the slope is 60 to 80 degrees. 8 years ago the entire slope was legally clear cut, yarder logged and torch burned with a helicopter. One year later this huge land slide occurred. Much of the logged area fell into the Klamath river and caused a sediment dam which completely blocked the river's flow until it washed down river.

BEAR CREEK 1901

RIVER MILE 20

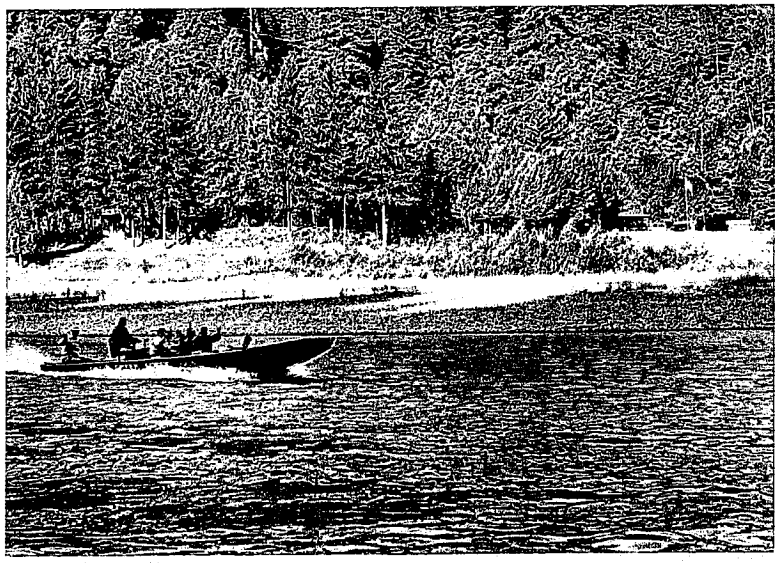
A picture taken by Koelber in 1901 shows Yuroks getting out of dugout canoes. Note the narrow V-shaped river bed.



BEAR CREEK 2001

RIVER MILE 20

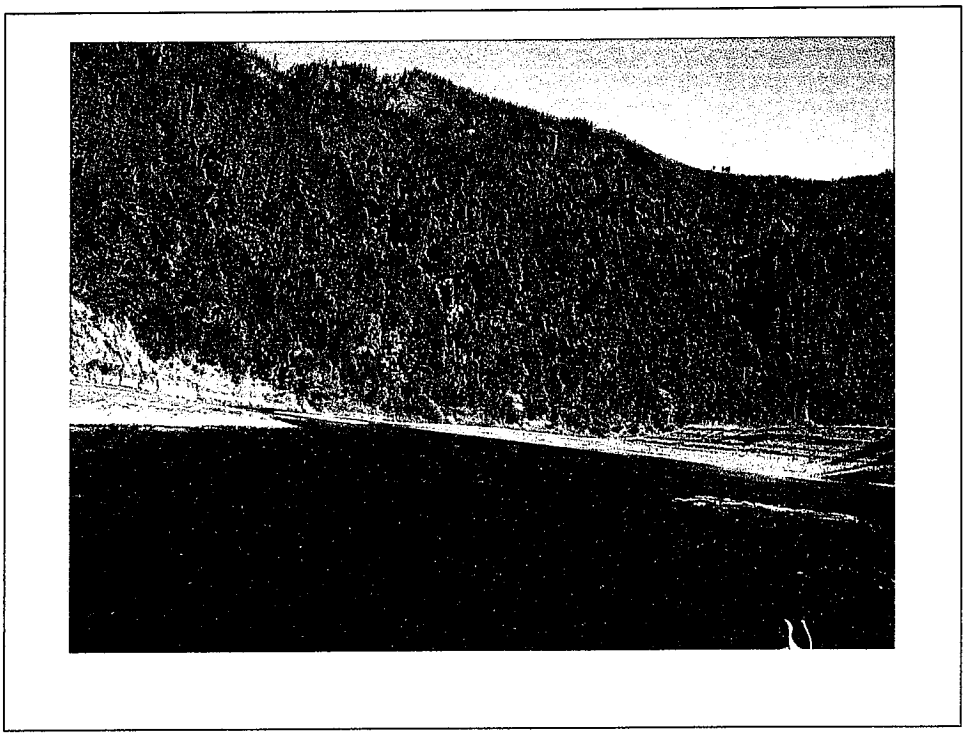
Almost the entire riverbed is filled with gravel and rock sediment.



BLUE CREEK LODGE 1950

RIVER MILE 16

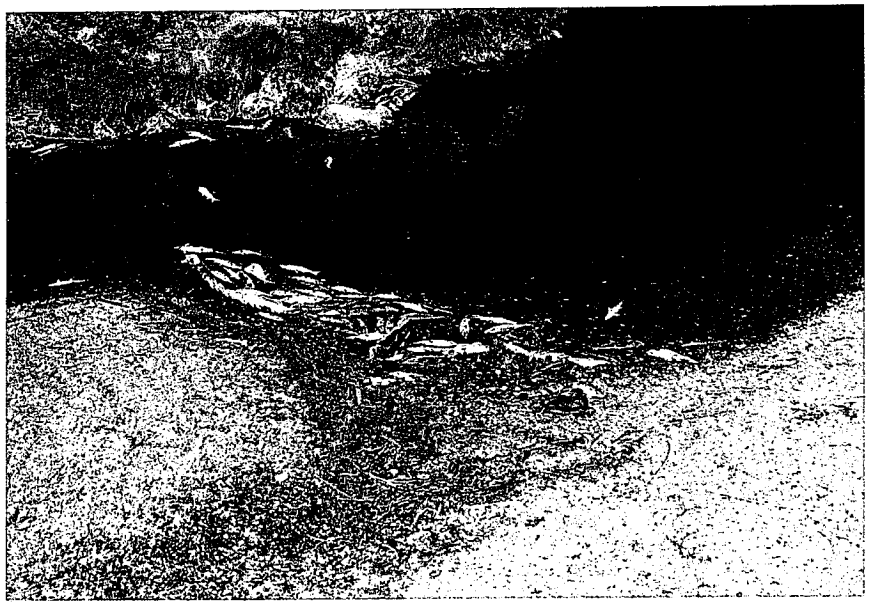
The Blue Creek Lodge and the land in front of the lodge was completely washed away by the 1955 and 1964 floods. This is the original Blue Creek Lodge boat. Note the boat's position in the river. In the next picture taken 50 years later the boat would be high and dry on a large sandbar.



BLUE CREEK LODGE SITE 2004

RIVER MILE 16

The Blue Creek Lodge site was at the left river bank site. Note the wide shallow contour of the river which has developed in the 50 years between pictures. There is a 40 foot high sediment wall on the right river bank. On the high ridge a recent clearcut with topsoil loss is seen as well as an old clear cut with no tree regrowth.



KLAMATH FISH KILL 2002

RIVER MILE 16

In 2002 68,000 fish were trapped and died in the lower 16 miles of the Klamath River due to a combination of too little water in the river and too much sediment. The sediment made the river wide and shallow.

KLAMATH FISH KILL 2002

RIVER MILE 16

Thousands of dead and decomposing Salmon, Steelhead and Sturgeon lining both sides of the lower 16 miles of the Klamath River was a life-altering experience for many. The Yuroks were so deeply moved that they stopped fishing for the rest of the year.

DEAD FISH 2002

RIVER MILE 0 TO MILE 16

Dead Salmon, Steelhead and Sturgeon lined both ides of the river from the mouth upriver for 16 miles.

BLACK BEAR ABOVE BLUE CREEK 2004

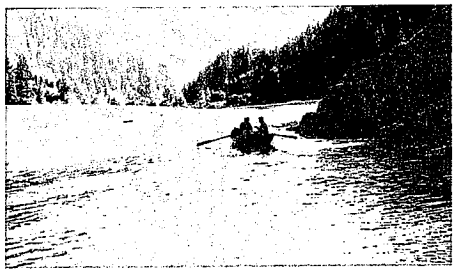
RIVER MILE 17

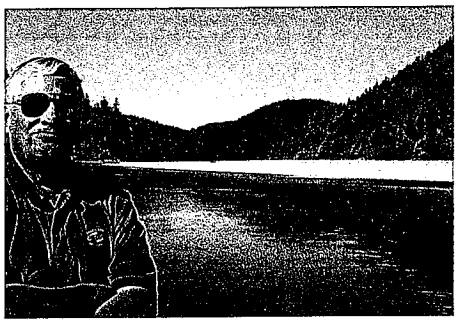
Note the volume and diversity of size of the sediment.

MOUNTAIN LION ABOVE SURPUR CREEK 2001

RIVER MILE 30

Note volume and size of sediment.



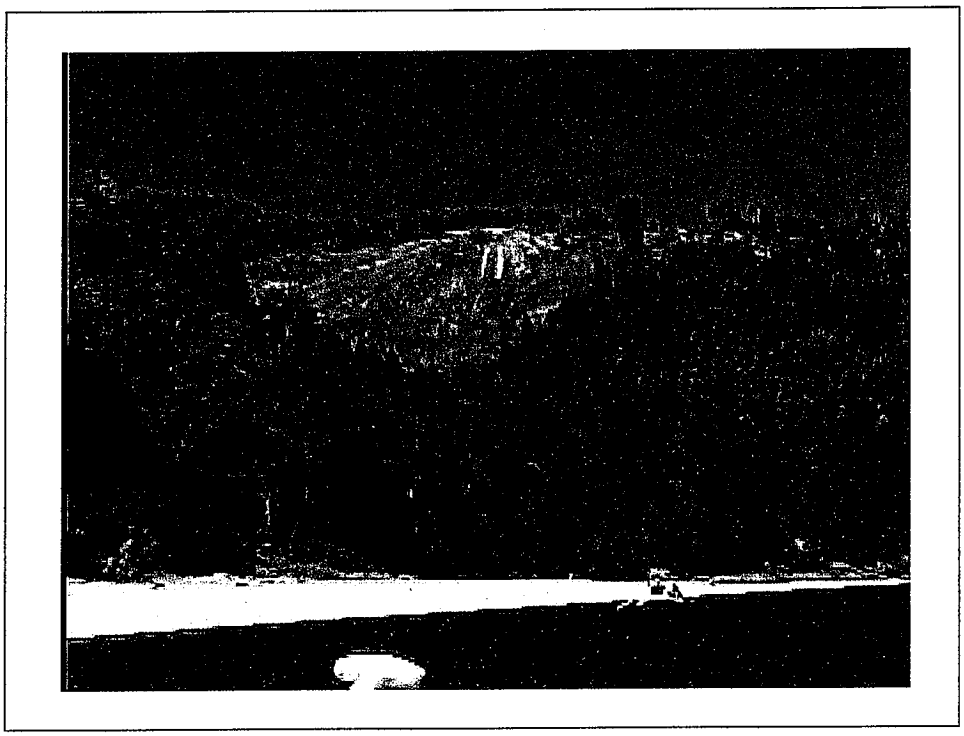


YUROK BOAT ABOVE AH PAH 1920

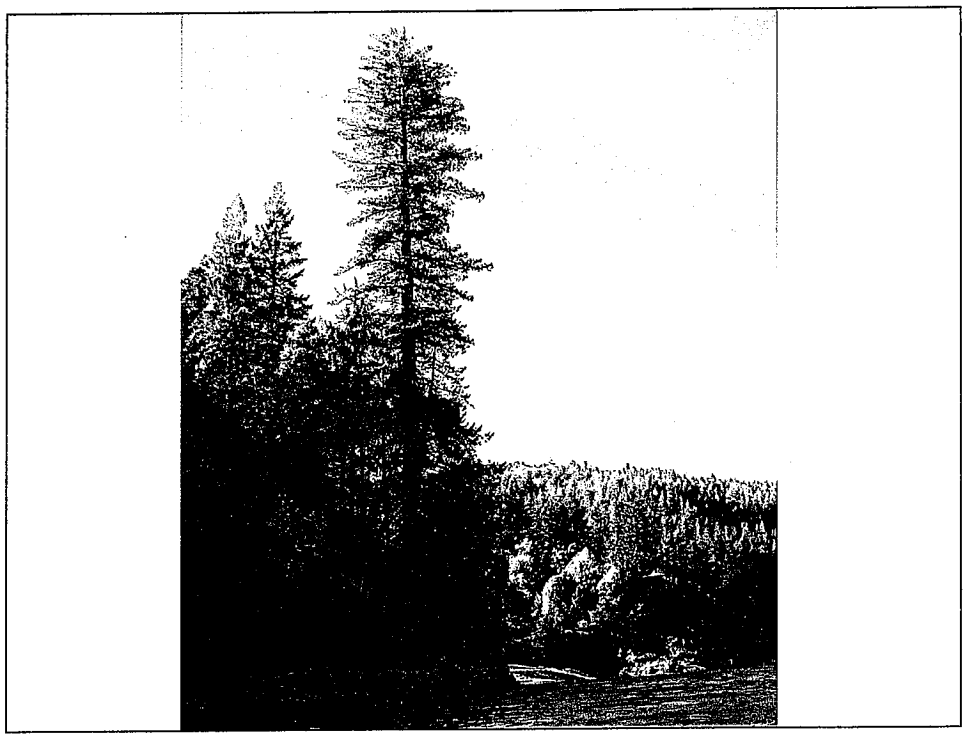
DENVER NELSON ABOVE AH PAH 2004

RIVER MILE 18

These photos taken 80 years apart show the same area of river above Ah Pah Creek. Note the huge build up of sediment from the rock outward on the right side of the river. The river bed has been transformed from V-shaped to wide and shallow.



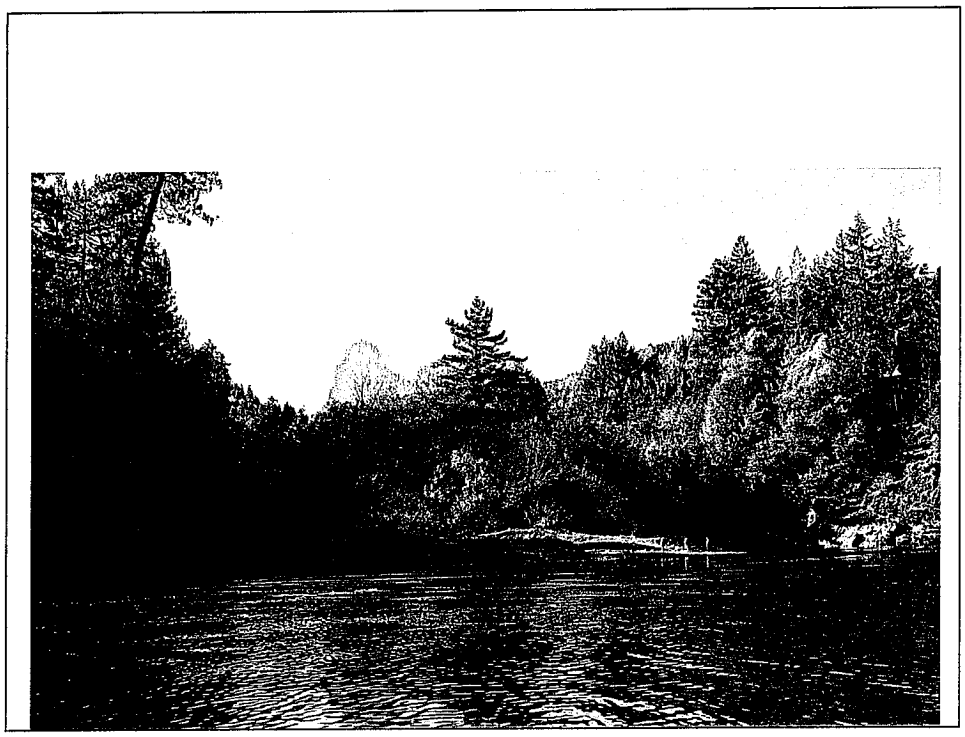
FRESH CLEARCUT ACROSS FROM SURPUR CREEK 2001
RIVER MILE 20



SURPUR CREEK 2004

RIVER MILE 20

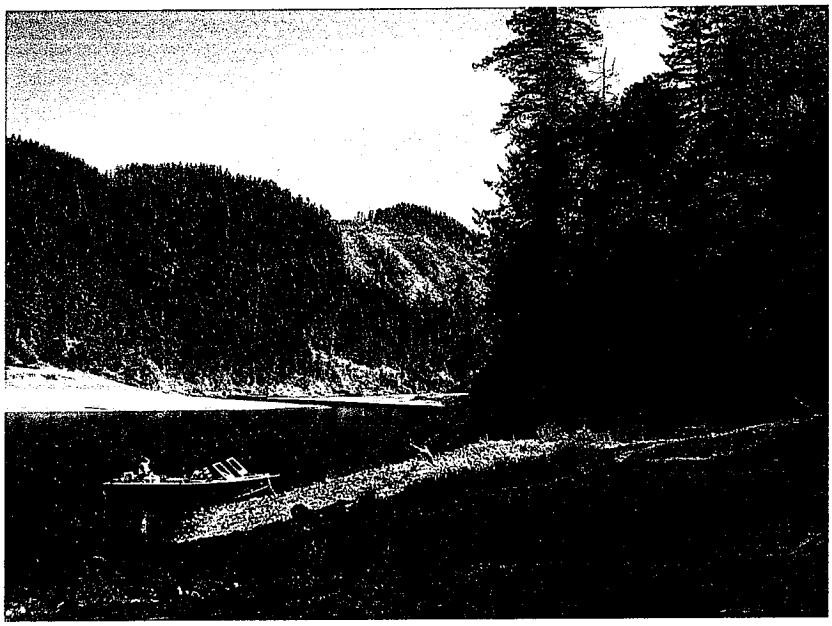
Note the large sediment plug at the mouth of the creek.



SURPUR CREEK 2004

RIVER MILE 20

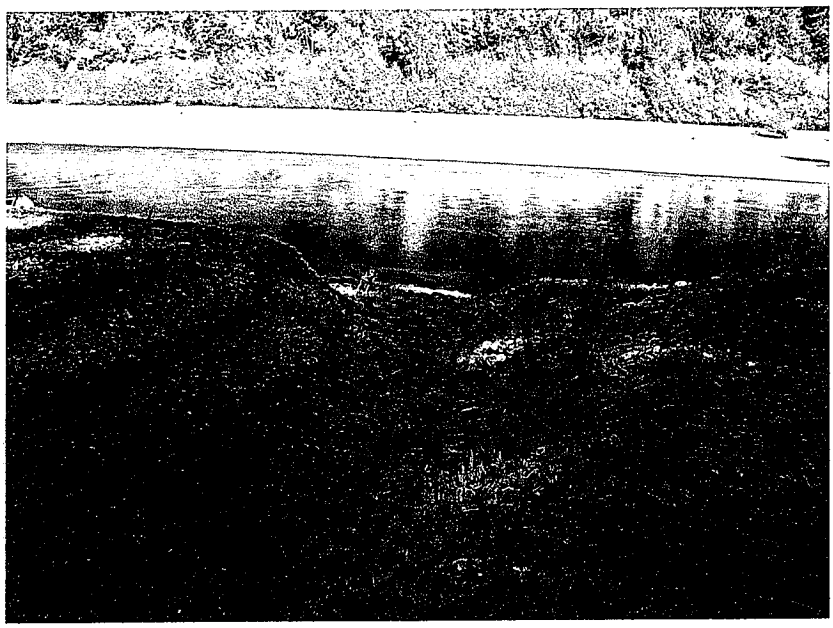
A closer view than the preceding slide. The huge plug of sediment extends from one edge of the creek mouth to the other.



SURPUR CREEK AUGUST, 2004

RIVER MILE 20

I own the mouth of Surpur Creek and have a small fishing shack in the trees on the right. Surpur Creek runs year round but in the summer and fall goes underground about 500 feet up from the river due to the large sediment plug. If the winter is wet enough, the creek washes the sediment plug into the Klamath allowing Salmon and Steelhead to come up the creek to spawn. My river boat is 22 feet long. There is a sediment plug 30 feet high by 500 feet long by 1000 feet wide blocking the mouth of Surpur Creek in the summer. Note the recent clear cut logging on very steep slopes in the background. I believe this manner of logging and yarding contributes to the excess sediment in the Klamath River



SURPUR CREEK 2004

RIVER MILE 20

My dog viewed from the bed of Surpur Creek. In the spring the creek flows here until it goes under the sediment in the summer and fall. Small fish often get trapped in the creek above the sediment. Large fish returning to spawn in the fall obviously cannot get across the sediment to get to the creek.

SURPUR CREEK 2004

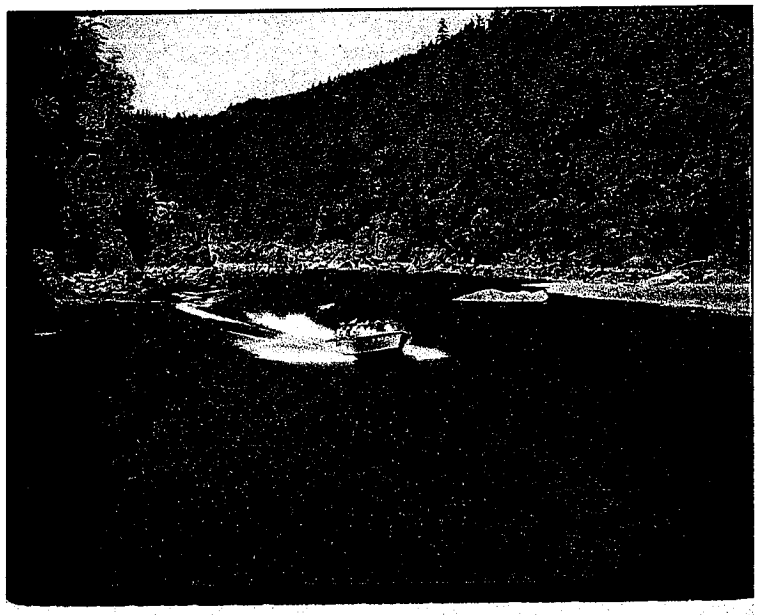
RIVER MILE 20

My wife and dog in front of the sediment plug at Surpur Creek.

SURPUR CREEK 2004

RIVER MILE 20

A closer view of the Surpur Creek sediment plug showing the large size of some of the sediment rocks.



THE KLAMATH QUEEN BELOW COON CREEK 1964

RIVER MILE 36

The Queen carried passengers in the 50's, 60's and 70's. Note the beach and the large rock on the right of the picture.

HUMBOLDT COUNTY BOARD OF SUPERVISOR CHAIRPERSON JILL GIST AND HER SON DANIEL BELOW COON CREEK 2004

RIVER MILE 36

Jill and Daniel on the same beach below Coon Creek in 2004. Note the much larger size of the beach. The rock seen in the preceding picture is completely covered by sediment.

JUDGE LORENZO SAWYER 1890

In the 1870's and 1880's "hydraulic mining" - a process by which enormous jets of water were blasted under high pressure at mountain sides and river banks to pulverize them in the search of a few flakes of gold – was causing vast quantities of sediment to bury houses, orchards and wheat fields downstream. In 1880 alone some 40,000 acres of farmland and orchards were destroyed while another 270,000 acres were severely damaged. All told some 12 billion tons of earth were blasted out of the hills and washed into local rivers.

In 1883 after making several personal trips up the rivers, across farms, and up to the mines to view the hydraulic mining debris in the Yuba river, Ninth Circuit Judge Lorenzo Sawyer ordered an end to hydraulic mining in California. His landmark ruling was based on **his personal observation** not alleged scientific studies. This was the first court decision favoring the environment in California. I hope that the California Water Board can make another decision for the environment and add the Klamath River to the 303-D list for sediment impairment. I would be pleased to take any or all of the board and staff up the Lower Klamath River for their own personal observations to confirm my pictures.