

**Elk County Water District**  
Post Office Box 54  
Elk, CA 95432

December 5, 1997

Ross Liscum, Chairman, and Members  
California Water Quality Control Board - North Coast Region  
5550 Skylane Boulevard, suite A  
Santa Rosa, CA 95403  
and via fax to (707) 523-0135

Dear Chairman Liscum and Members of the Board:

The Elk County Water District Board of Directors strongly supports the North Coast Regional Water Quality Control Board Preliminary Staff Recommendation of November 10, 1997, to add Greenwood Creek to the 303(d) list of north coast impaired waterbodies.

Greenwood Creek was on the original 303(d) list of impaired waterbodies and was removed apparently because of its size (15,000-16,000 acres). With a town's water supply and a Coho Salmon fishery at risk, the size of the watershed is not a reasonable criterion for exclusion from the list. Greenwood Creek watershed is currently 55-60% owned by Louisiana Pacific Corporation, and has been the site of major timber operations for one hundred and sixty years. The Creek has suffered serious impacts to water quality from past and from on-going management activities. Potential future impacts are also an important concern. Following is a brief discussion of these impacts in support of 303(d) listing for Greenwood Creek.

**PAST AND ON-GOING IMPACTS TO GREENWOOD CREEK WATER QUALITY**

Greenwood Creek watershed has been severely impacted by past management activities, including removal of most of the old growth and second growth Redwood and Douglas Fir in the watershed, and severe sedimentation from road construction, tractor logging and clearcutting. The impacts from past logging are evident in several ways, including

- Extremely high turbidity in Greenwood Creek during peak flows
- Severe depletion of the Greenwood Creek Coho Salmon and Steelhead fish populations

These impacts alone require the 303(d) listing of Greenwood Creek in order to insure that appropriate and prompt remedial action is undertaken by all concerned agencies. Immediate action should include

- addressing the critical need for additional monitoring of both water quality and the salmonid fishery
- addressing the critical need to set water quality standards for upstream management activities

Enclosed you will find a graph of Greenwood Creek turbidity readings in NTU's from January 1992 through August 1997. These water samples were taken at a station in Greenwood Creek near ECWD Well No. 1, which is located under the Highway One bridge near the mouth of Greenwood Creek. The peak turbidity readings in the Creek often greatly exceed Department of Health Services standards for drinking water, with readings above 500 NTUs, during winter months, and have shown consistently high readings throughout the winter, over the entire period from 1992 through 1997.

The Department of Health Services standard for drinking water is ~~25~~ 5 NTU's. When Creek readings reach levels of 500 NTU's and above, the turbidity in Well No. 1, which is located near the stream channel, can reach 20 NTU's and above, cannot be used for drinking water and cannot be treated. The ECWD must instead switch to a second well site (Well No. 2) during periods of peak flow. This backup well site, however, produces water with a very high, naturally occurring iron content. The expense of dealing with these pollution problems, which exceeds \$10,000 per year, is borne entirely by the water users.

These high turbidity readings constitute a water quality impairment both to domestic water use and to the Coho Salmon and Steelhead fishery in Greenwood Creek. Additional evidence of turbidity pollution can be found in the brown plume out in the ocean, off the Greenwood Creek estuary, which persists for approximately three days after every heavy winter storm.

In addition to pollution problems, the water supply to the town of Elk is threatened by stream bank erosion, with imminent danger to Well No. 1 from catastrophic flooding.

The salmonid fishery is also a particular concern, since the fish must live in untreated water, and since the salmonid fishery is our "canary in the coal mine." The health of the fishery is the best indicator of the health of the watershed.

Severe depletion in the salmonid fish population has occurred in Greenwood Creek watershed over the last twenty years, as documented by local fishermen; yet Greenwood Creek still contains struggling populations of both Coho Salmon and Steelhead. (Coho Salmon and Steelhead are documented in Louisiana Pacific Corporation's draft Sustained Yield Plan for Mendocino County, Vol. 2, Greenwood Creek, page 21. Steelhead are documented in the 1995 Greenwood Creek Stream Survey Report, Dr. Fred Euphrat, May 5, 1996.)

The Environmental Protection Agency recently listed the Coho Salmon as a threatened species throughout northern California. The numbers mentioned by the National Marine Fisheries Service are alarming. From a teeming population estimated to have been 50,000 to 125,000 fish, the number of Coho Salmon in our region has dropped to less than 5,000 fish in recent years. (Federal Register: November 25, 1997, Volume 62, Number 227)

Although L-P's current draft Sustained Yield Plan documents the presence of Coho Salmon in Greenwood Creek, our local fishermen have not seen a Coho Salmon in the Creek since 1975. In addition, local fishermen reported a steep drop in the Steelhead population during the decade of 1980-1990.

Additional impairment of the fishery is documented in the 1995 Greenwood Creek Stream Survey, including areas of unvegetated and unstable stream banks, and lack of fish pools and large woody debris, in the first ten miles of the mainstem of Greenwood Creek.

The source of the sediment impacts on the fishery and water quality is primarily roads. The Greenwood Creek Watershed Project conducted a survey of road erosion/stream

sedimentation sites on 25 miles (approximately 25%) of the watershed road system, in 1996-97, and found serious erosion problems at numerous sites on almost all surveyed roads.

The surveyed road system covered non-industrial timber lands, and included residences, vineyards, orchards, ranches and small timber land owners. The condition of roads on industrial timber land is unknown, since Louisiana Pacific Corporation, which owns more than half of the watershed, has failed to implement a road survey that was scheduled for 1996 in L-P's draft Sustained Yield Plan then current (August 1995).

#### POTENTIAL IMPACTS TO GREENWOOD CREEK WATER QUALITY

The Elk County Water District is very concerned by the statement in a recent Timber Harvest Plan (THP 1-97-352 MEN) that it is L-P's Sustained Yield Plan goal to clearcut 32% of L-P's timber holdings in Greenwood Creek watershed over a ten year period. We feel that this goal is not only unsustainable as to timber productivity, it poses a threat to all Greenwood Creek natural resources, including water quality and quantity.

The Elk County Water District has several serious concerns about current timber harvesting in the watershed, and about L-P's draft Sustained Yield Plan, including, but not limited to, the following.

- lack of water quality monitoring and standards
- unsustainable levels of logging; excessive road construction
- use of herbicides and pesticides associated with clearcutting and "even-aged management"
- division of the watershed into "upper" and "lower" planning watersheds with different "relative risk ratings"
- insufficient mitigations such as a road inventory and road maintenance program, inadequate stream protection zones
- implementation of the SYP, through the filing of timber harvest plans, before the SYP is approved

L-P current draft SYP states the following with regard to chemical pollution:

"Chemical pollution from forest management activities on L-P timberlands is not considered to be a problem for water quality in WWAA 84 [Greenwood Creek]....Currently, herbicide use is excluded from the Class I and Class II WLPZs and from 20-foot buffers along Class III watercourses." (L-P SYP, p. 10)

This quotation clearly poses the threat of future herbicide and pesticide use in Greenwood Creek watershed, particularly given L-P's goal of "intensive even-aged management" for large areas of L-P timber lands in this watershed. Herbicide and pesticide use outside the stream zones may be occurring without any notice to the ECWD.

The Elk County Water District opposes the use of herbicides and pesticides in this watershed. The effects of herbicides and pesticides, alone or in combination, have not been sufficiently studied for their impacts on human, animal and fish populations. Chemical pollution can be extremely difficult to detect.

In regard to road monitoring and maintenance, L-P's current draft Sustained Yield Plan has this to say:

"The road erosion relative hazard ratings for this WWA [Greenwood Creek] indicate that all planning watershed [sic] have moderately low or moderate potential for sediment production and delivery to streams via the road network, and therefore should receive only average or low priority for road inventory, maintenance, and mitigation efforts...." (L-P SYP, p. 40)

It is difficult to understand how L-P's Sustained Yield Plan can give an "average or low" priority to "road inventory, maintenance, and mitigation," when the SYP provides no information about road and stream crossing conditions. It is also difficult to understand how L-P's SYP can state that Lower Greenwood Creek watershed is a "high risk" area for beneficial uses, and yet a "low priority" for road maintenance.

The erosion hazard map in the SYP contains very large areas of "high" and "extreme" erosion hazard, with no areas of "low" or "moderate," and yet the SYP text produces "low" and "moderate" hazards in its "Watershed Relative Risk" rating charts, by figuring in such factors as roads and stream crossings. No inventory of roads and stream crossings has been done, however. It is likely that the erosion hazard in Greenwood Creek watershed is very much higher than stated in the SYP. At the least, the SYP contains insufficient information to assess the potential impacts from the proposed "intensive even-aged management" plan.

The ECWD is aware of at least five miles of new road construction that has occurred in association with the following Timber Harvest Plans over the last three years:

GREENWOOD CREEK/BIG TREE CREEK - THP 1-97-352 - (new THP)  
90+ ac (clearcutting) - road construction/reconstruction (steep slopes)

UPPER SOUTH GREENWOOD - THP 1-96-042  
172 ac (SW prep 17, Seed tree removal 147, clearcut 8, thinning 13), inclu. cutting of old growth [ nr Cliff Ridge about 4-5 mi from Signal Ridge] - 2 mi. of road construction (unstable areas, steep slopes)

NORTH MORRISON - THP 1-96-514  
136 ac - SW prep - road construction (unstable areas, steep slopes)

SIGNAL RIDGE PLAN THP 1-96-208  
166 ac (clearcut 47, SW removal 8, seed tree removal 25, alternative 64, rehab 15 - altogether, almost a total clearcut) - road construction (steep slopes)

SALVAGE PLAN THP 1-95-013  
122 ac (part of the old exemption plan)

BARN GULCH THP 1-95-315  
194 ac (thinning) - road construction (steep slopes)

GREENWOOD CORRAL - THP 1-94-351  
431 ac (thinning) - road construction (steep slopes)

MILLS WEAVER MCLAUGHLIN PLAN (non L P)  
197 ac of selection

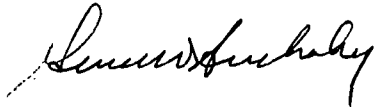
total: 1,508 ac (10% of watershed in 3 years)  
total L-P: 1,311 ac (15% of L-P holdings in 3 years)

Several of the above-mentioned timber harvest plans can be found in L-P's SYP Map entitled "Current Timber Harvest Plans." These Timber Harvest Plans refer to the SYP in numerous instances, and describe themselves as expressions of the SYP. In other words,

Louisiana Pacific has begun to implement the draft Sustained Yield Plan before it has been approved by any agency and before there has been a public hearing. The Timber Harvest Plans are going forward, but many of the proposed SYP mitigations, such as the road maintenance program, are not going forward; and none of the proposed mitigations have been approved by the appropriate state agencies.

In conclusion, the Elk County Water District expects serious impacts to water quality from future timber harvests in this watershed, even while past and on-going impacts continue to be insufficiently monitored and mitigated. We therefore urge the Regional Water Quality Board to return Greenwood Creek to the 303(d) list and to begin implementing the 303(d) process for this watershed.

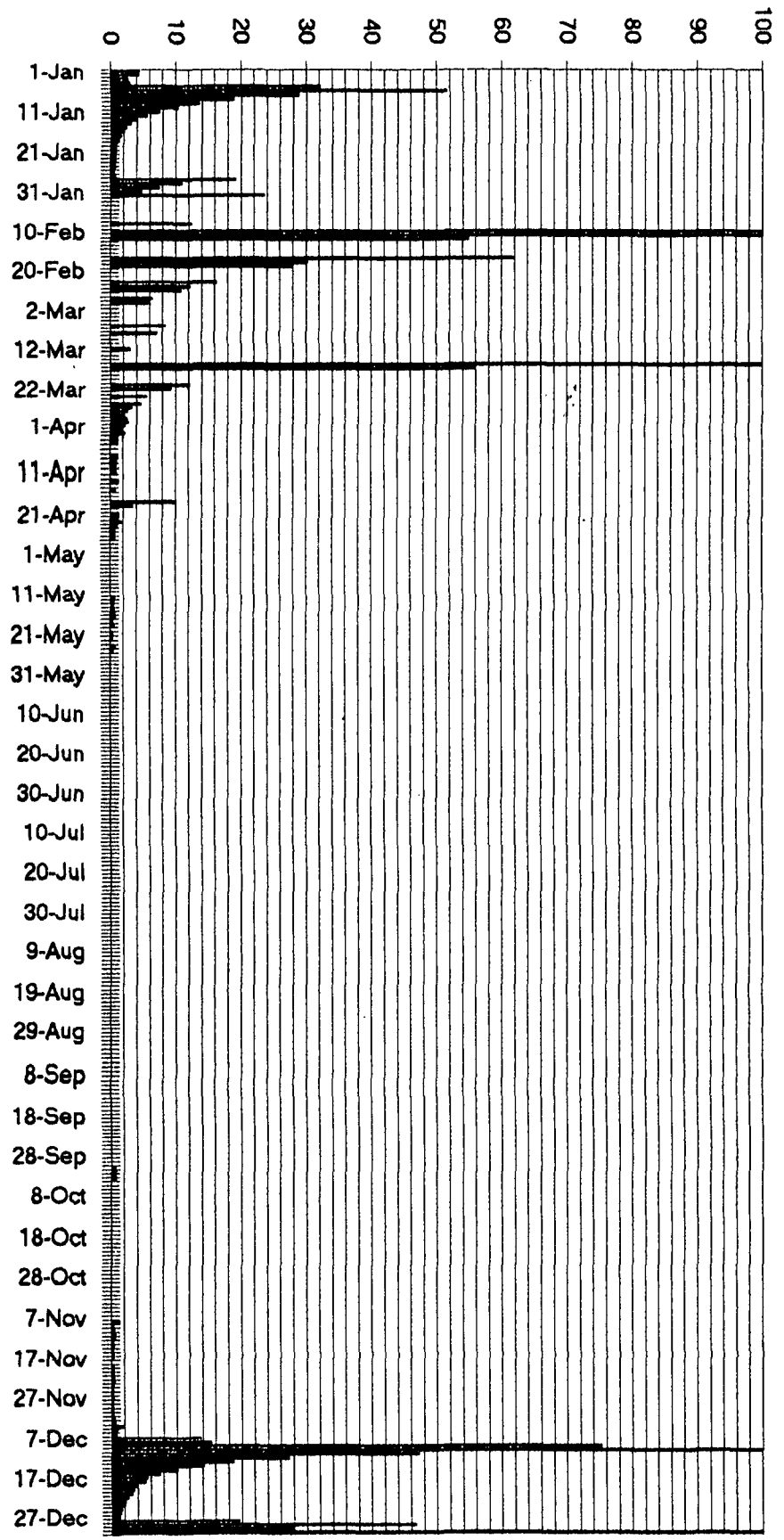
Yours respectfully,

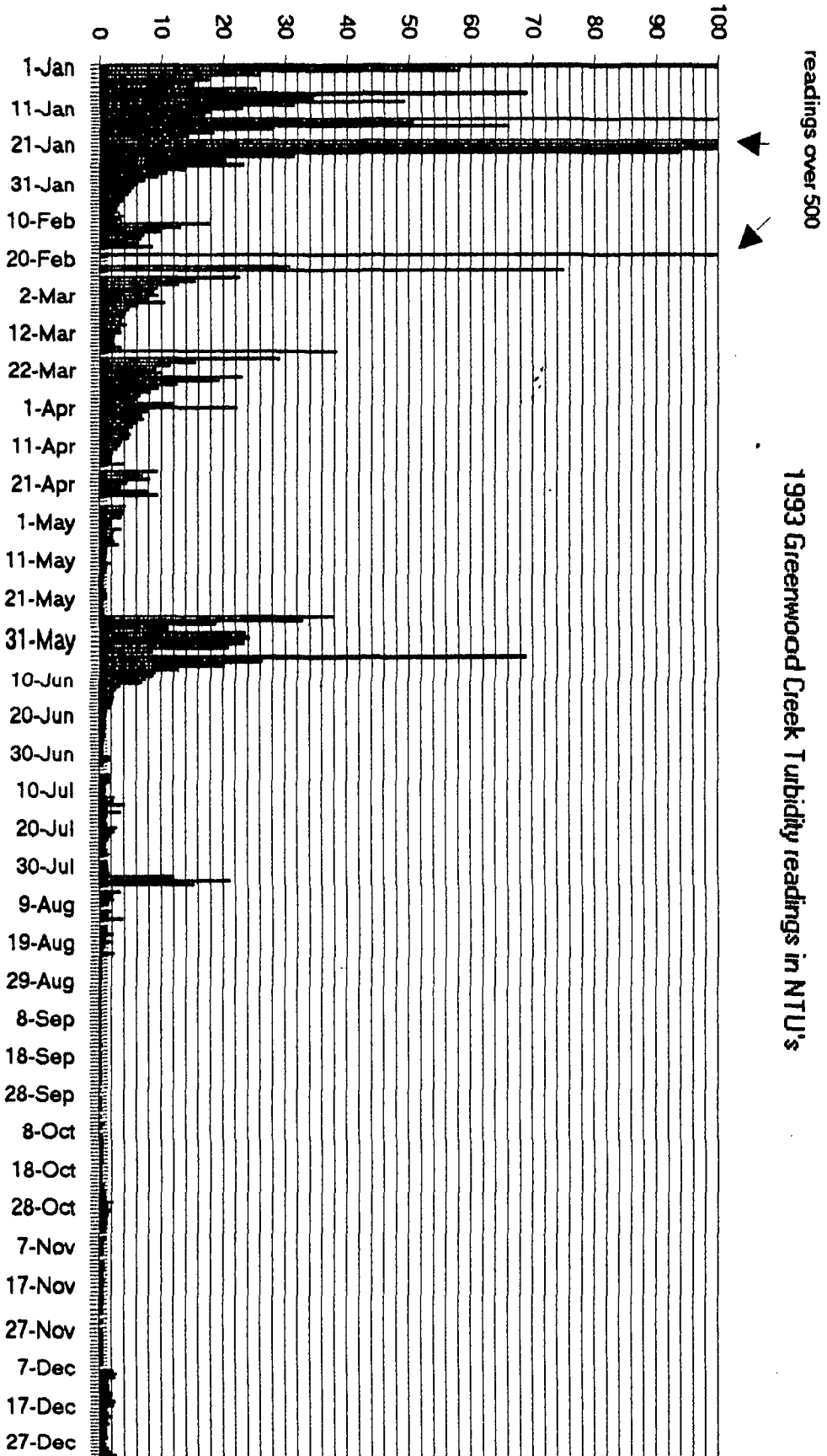


Gerald W. Huckaby  
President of the ECWD Board of Directors

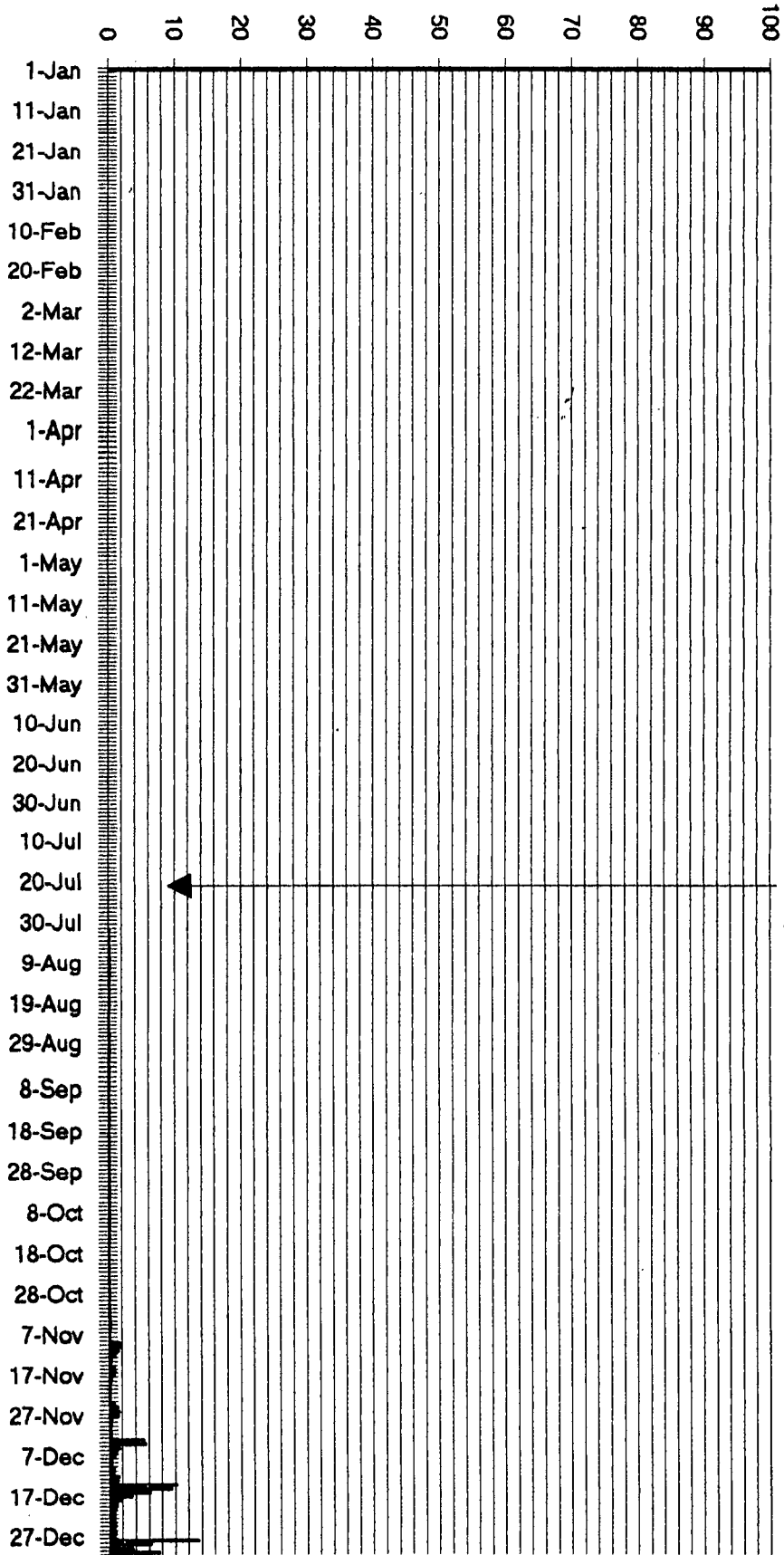
enc. Greenwood Creek Turbidity Readings in NTU's, 1992-1997, six pages

1992 Greenwood Creek Turbidity readings in NTU's



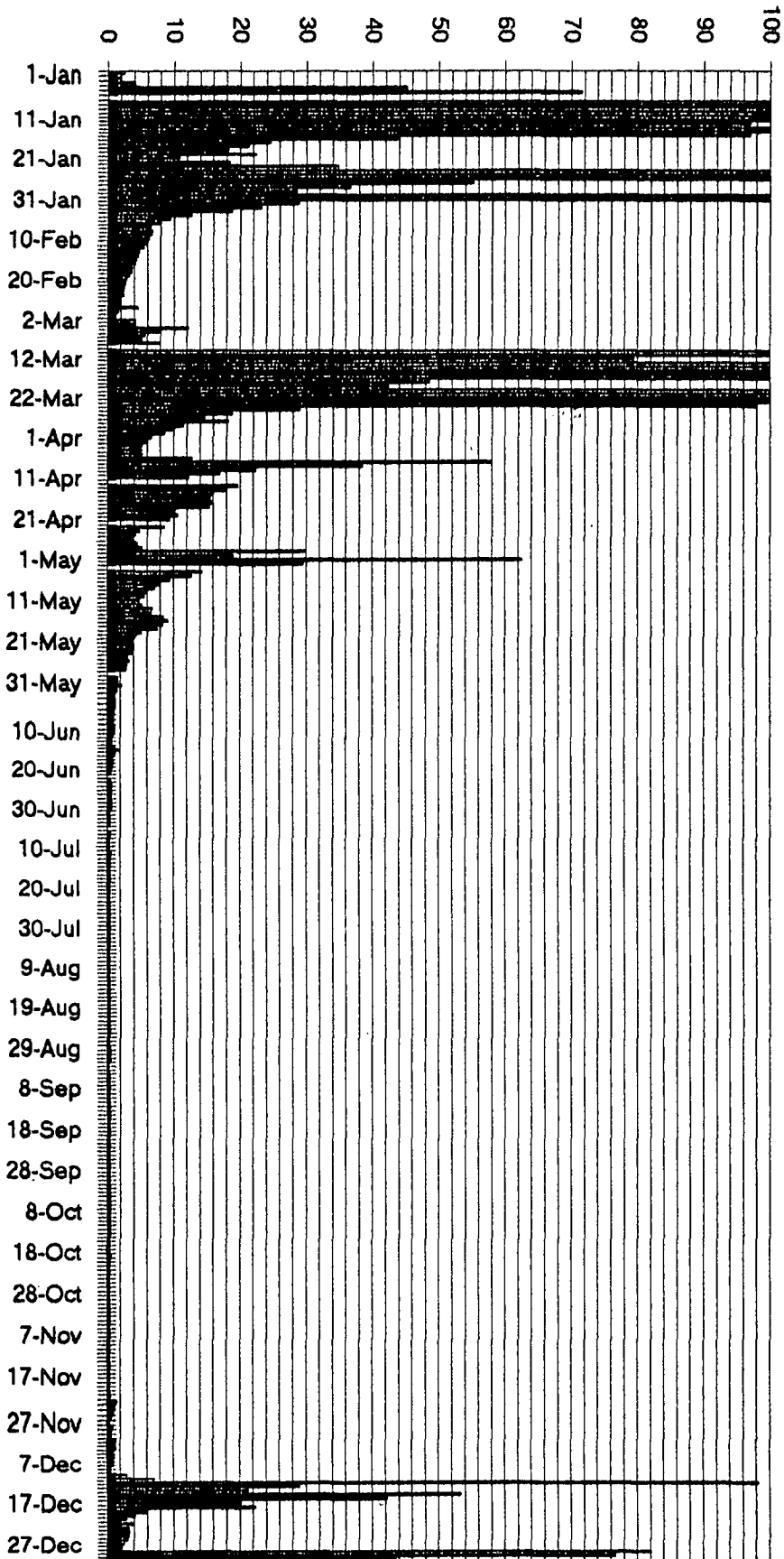


1994 Greenwood Creek Turbidity readings in NTU's

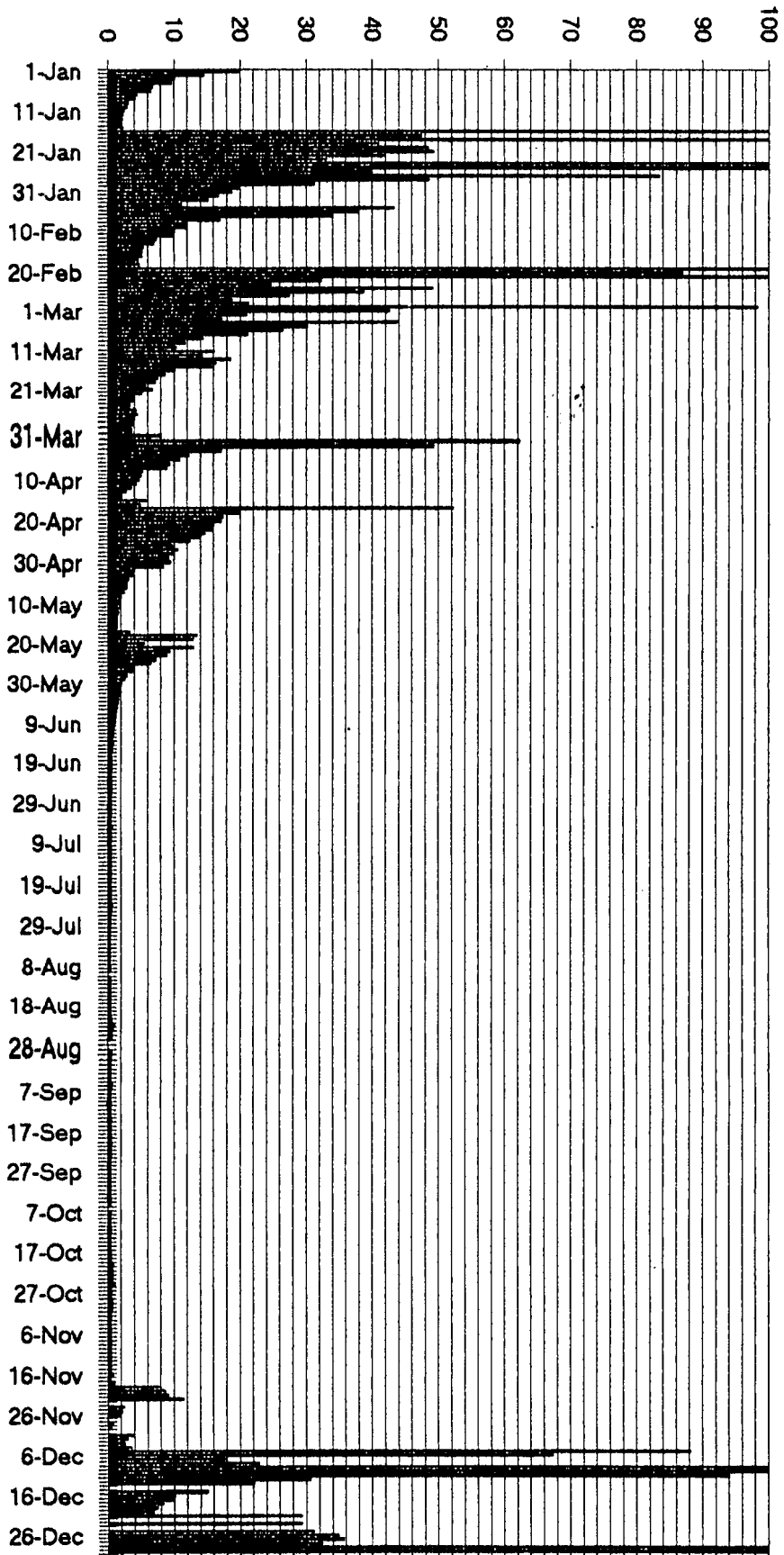




1995 Greenwood Creek Turbidity readings in NTU's



1996 Greenwood Creek Turbidity readings in NTU's



1997 Greenwood Creek Turbidity readings in NTU's

