Summary of Riparian Conditions - South Fork Clearwater

Riparian Conditions

Change in riparian function, as it relates to aquatic function, was assessed using: 1) historic mining activities in the riparian area (principally dredge mining); 2) roads that encroach on streams; 3) grazing effects on riparian function; 4) the amount of roads in the streamside area; 5) and the amount of past harvest in the streamside area. The first three items are displayed on Map 15. This information was compiled by district resource specialists. Item 4 was included in this analysis in addition to item 2, since they look at two different aspects of road effects on riparian function. Item 4 ratings are based on the road density classes described in the ICRB Science Assessment. These analysis items are summarized into a rating of riparian departure (the amount of change in inherent riparian function). Table 3.17 displays the analysis item ratings along with the summary riparian departure rating. Where the rating for columns 3 through 5 are low, they are not shown on the table.

Table 3.17 - Summary of Riparian Conditions							
ERU	Major ALTAs	Level of Historic Streamside Mining	Level of Encroaching Roads	Level of Grazing Effects	Streamside Road Density	Streamside Harvest Density	Riparian Departure
Lower SFk Canyon	3	Moderate	Very High		High	High	Very High
Upper SFk Canyon	6,3	Very High	Very High		High	High	Very High
Lower Meadow	4,3,18		High	High	High	Very High	Very High
Upper Meadow	21,4,3		High		High	Very High	High
L. Cougar-Peasley	3,4		Very High		High	Very High	Very High
U. Cougar-Peasley	21				Moderate	Very High	High
Lower Silver	3,4				Low	Moderate	Low
Upper Silver	21,1				Very Low	Low	Low
Lower Newsome	6,3	Very High	Moderate		High	High	Very High
Upper Newsome	21,6				High	High	High
Lower American	6,18	Very High	Moderate	Moderate	High	Moderate	Very High
Upper American	6,21				Moderate	Moderate	Moderate
Lower Red River	6,18,21	Very High	High	High	High	Very High	Very High
Mid Red River	6,18,4		Moderate	Moderate	High	Very High	High
Upper Red River	1				High	Very High	High
Lower Crooked	3,21,6	Very High	High		High	Moderate	Very High
Upper Crooked	121		Moderate		Moderate	Low	Moderate
Lower 10 Mile	3,6,21				Low	Low	Low
Upper 10 Mile	1,2,5				Very Low	Very Low	Very Low
Lower E.Wing 20	6,18,21,3				Moderate	Moderate	Moderate
Lower W.Wing 20	21,3,6				Moderate	Moderate	Moderate
Upper Wing 20	1				Low	Low	Low
Lower Johns	3,4				Very Low	Low	Low
West Johns	4				Moderate	Moderate	Moderate
Upper Johns	1,2,5				Very Low	Low	Low
Lower Mill	3,4		Moderate	Moderate	High	High	High
Upper Mill	6,1				Moderate	High	Moderate

Ratings displayed in Table 3.17 were defined using the following measures:

- Level of historic mining, level of encroaching roads and level of grazing effects all use the following mileage categories:
  - ***Very High:*** greater then 10 miles;
  - ***High:*** between 5 -10 miles;
  - ***Moderate:*** between 2 - 5 miles;
  - ***Low:*** less than 2 miles (low ratings not shown on table)
- Streamside road density (using Quigley, 1997 road density classes):
  - ***Very High:*** greater than 4.7 miles per square mile;
  - ***High:*** between 1.7 - 4.7 miles per square mile;
  - ***Moderate:*** between 0.7 - 1.7 miles per square mile;
  - ***Low:*** between 0.11 - 0.7 miles per square mile;
  - ***Very Low:*** less than 0.1 miles per square mile
- Streamside Harvest Density:
  - ***Very High:*** greater than 15 acres of harvest per 100 acres of streamside area;
  - ***High:*** between 5 - 15 acres of harvest per 100 acres of streamside area;
  - ***Moderate:*** between 2 - 5 acres of harvest per 100 acres of streamside area;
  - ***Low:*** between 0.5 - 2 acres of harvest per 100 acres of streamside area;
  - ***Very Low:*** less than 0.5 acres of harvest per 100 acres of streamside area

Changes in riparian function have occurred from human activity. The greatest amount of change has occurred along the tributary mainstem rivers in the upper basin, along the South Fork Clearwater River, and along meadow sections. Historic mining and roads that encroach on riparian/stream areas are believed to have had the greatest effect on riparian function. These activities have resulted in press disturbances or semi-permanent alterations of the riparian environments. This type of regime alteration is not within the range of natural disturbances in these areas. The areas that have the greatest riparian departure (South Fork Clearwater River and tributary mainstems) represent some of the most valuable aquatic habitats in the subbasin.