FIGURE 17a

COTTONWOOD CREEK GEOMORPHIC STUDY
CALFED PROJECT #97-NO7

GMA GRAHAM MATTHEWS & ASSOCIATES
Hydrology • Geomorphology • Stream Restoration
P.O. Box 1516  Weaverville, CA  96093-1516
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FIGURE 17b

COTTONWOOD CREEK GEOMORPHIC STUDY
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COTTONWOOD CREEK GEOMORPHIC STUDY
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FIGURE 17d

GMA GRAHAM MATTHEWS & ASSOCIATES
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COTTONWOOD CREEK BULK SAMPLING
COMBINED SUBSURFACE SAMPLES

COTTONWOOD CREEK GEOMORPHIC STUDY
CALFED PROJECT#: 97-N07

GRAIN SIZE (mm)

CUMULATIVE PERCENT FINER (%)
COTTONWOOD CREEK SUBSTRATE
Comparison of Particle Size Indices from Bulk Samples and Pebble Counts for 7 Sites

PARTICLE SIZE INDEX FROM BULK SAMPLE (mm)

PARTICLE SIZE INDEX VALUE FROM PEBBLE COUNT (mm)

D50
D84
1:1 Relationship
COTTONWOOD CREEK S BSTRATE
Pebble Count Particle Size Parameters vs. Long Profile Distance

- D50
- D84
- Linear (D50)
- Linear (D84)

DISTANCE (ft)

ARTICLE SIZE (μm)

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FIGURE
COTTONWOOD CREEK near COTTONWOOD
Comparison of Bedload Rating Curve, USGS Gage #11376000, WY 1977-1979 and Clear Creek WY2003 Data

\[ y = 0.0069x^{1.1584} \]
\[ R^2 = 0.9723 \]

\[ y = 1E-18x^{5.8451} \]
\[ R^2 = 0.9894 \]

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**COTTONWOOD CREEK SEDIMENT TRANSPORT**

Comparison of Cottonwood Creek and Clear Creek Unit Discharge Bedload Transport Rates

\[ y = 19.004x^{1.1584} \]
\[ R^2 = 0.9723 \]

\[ y = 9E-05x^{5.8451} \]
\[ R^2 = 0.9894 \]

**COTTONWOOD CREEK GEOMORPHIC STUDY**

**CALFED PROJECT#: 97-N07**
COTTONWOOD CREEK BENGARD RANCH 1999 AERIAL PHOTO AND TOPOGRAPHIC MAPPING

LEGEND
- SALMON BEDS (11/98)
- INDEX CONTOURS (10')
- 1' CONTOURS
- HORIZONTAL DATUM: NAD83
- VERTICAL DATUM: NGVD29

FIGURE 27