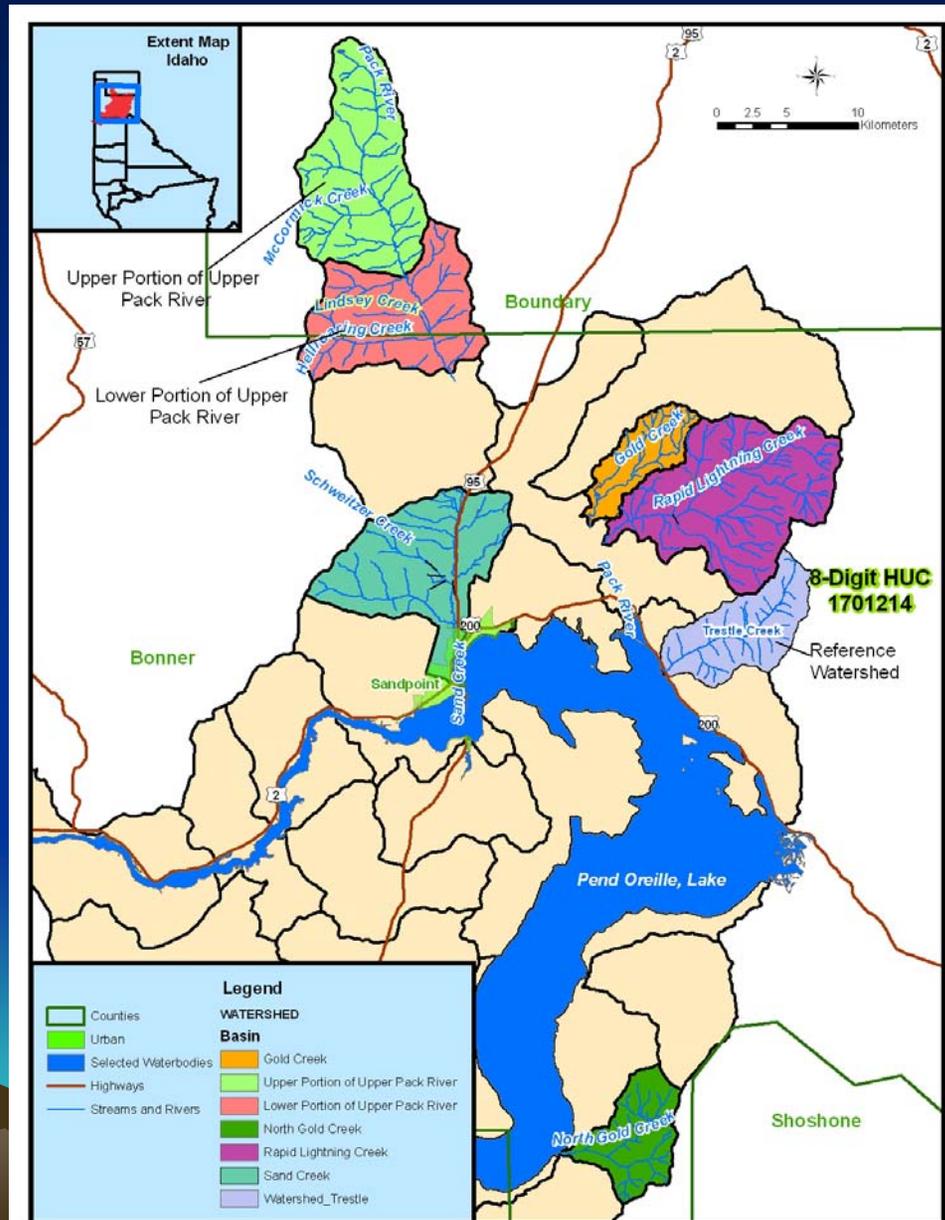


PEND OREILLE SEDIMENT TMDL

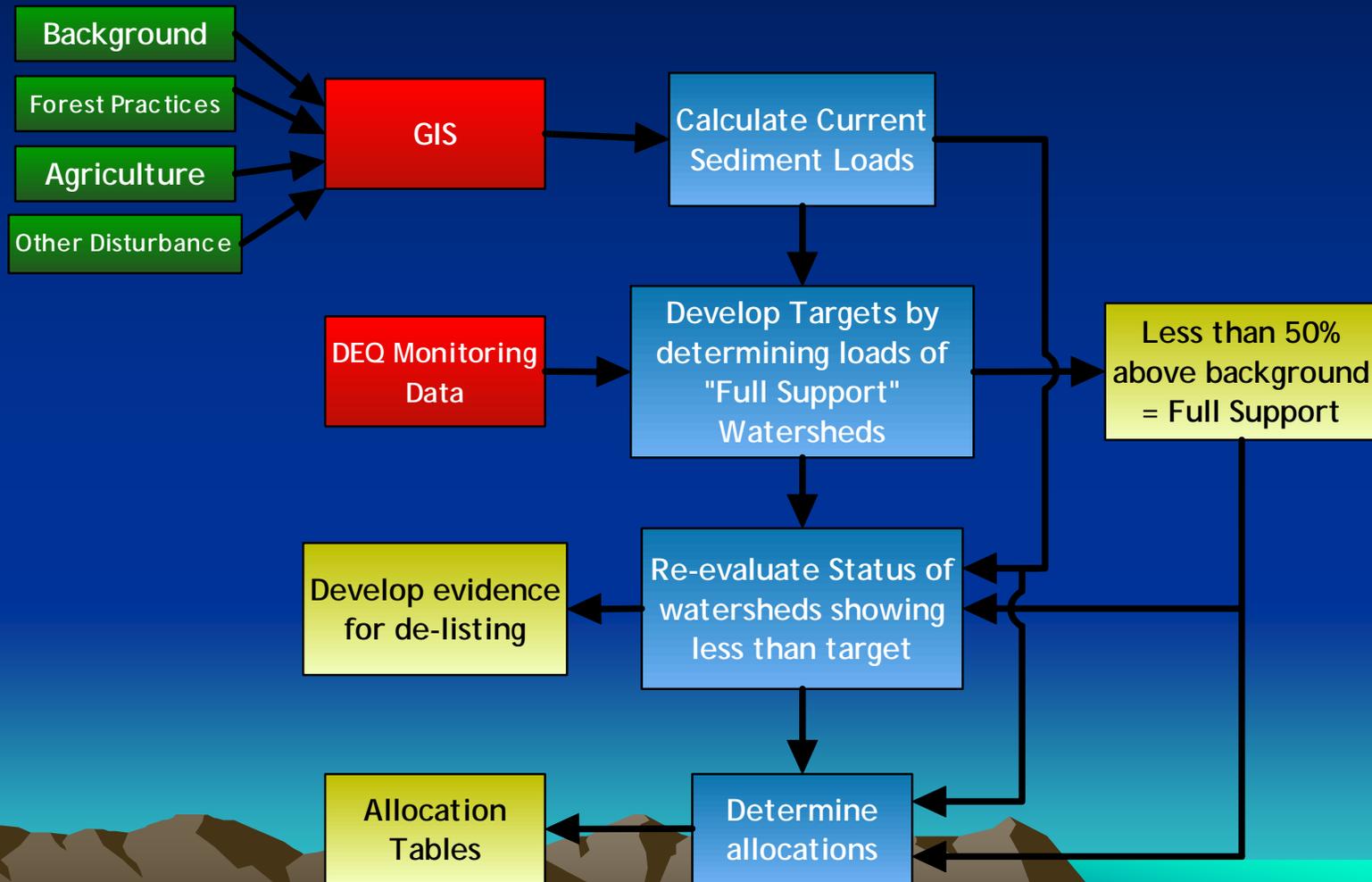
BY BRUCE CURTIS
PARSONS



WATERSHED BOUNDARY MAP



Sediment TMDL Process



SEDIMENT SOURCES

- Land Use
 - Forest
 - Cropland
 - Pastureland
 - Shrubland
 - Urban
 - Barren
 - Water



SEDIMENT SOURCES cont'd

- Roads
 - Stream Crossing
 - Within 200 feet of a stream, but not at stream crossing
 - Greater than 200 feet from a stream
- Forest – Harvested Areas
 - Harvested between 2004 through 2006
 - Harvested between 2001 through 2003
 - Harvested between 1997 through 2000

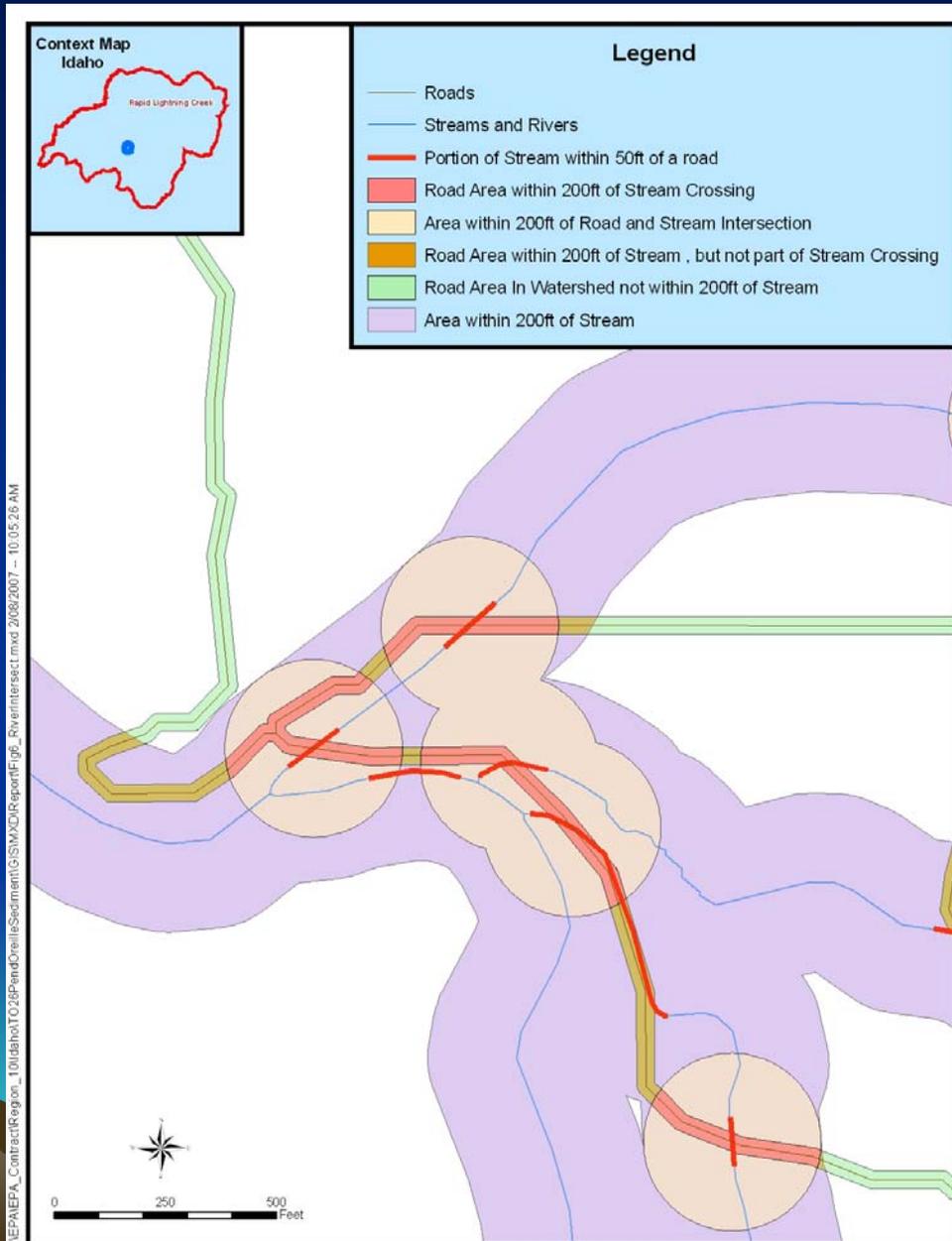


SEDIMENT SOURCES cont'd

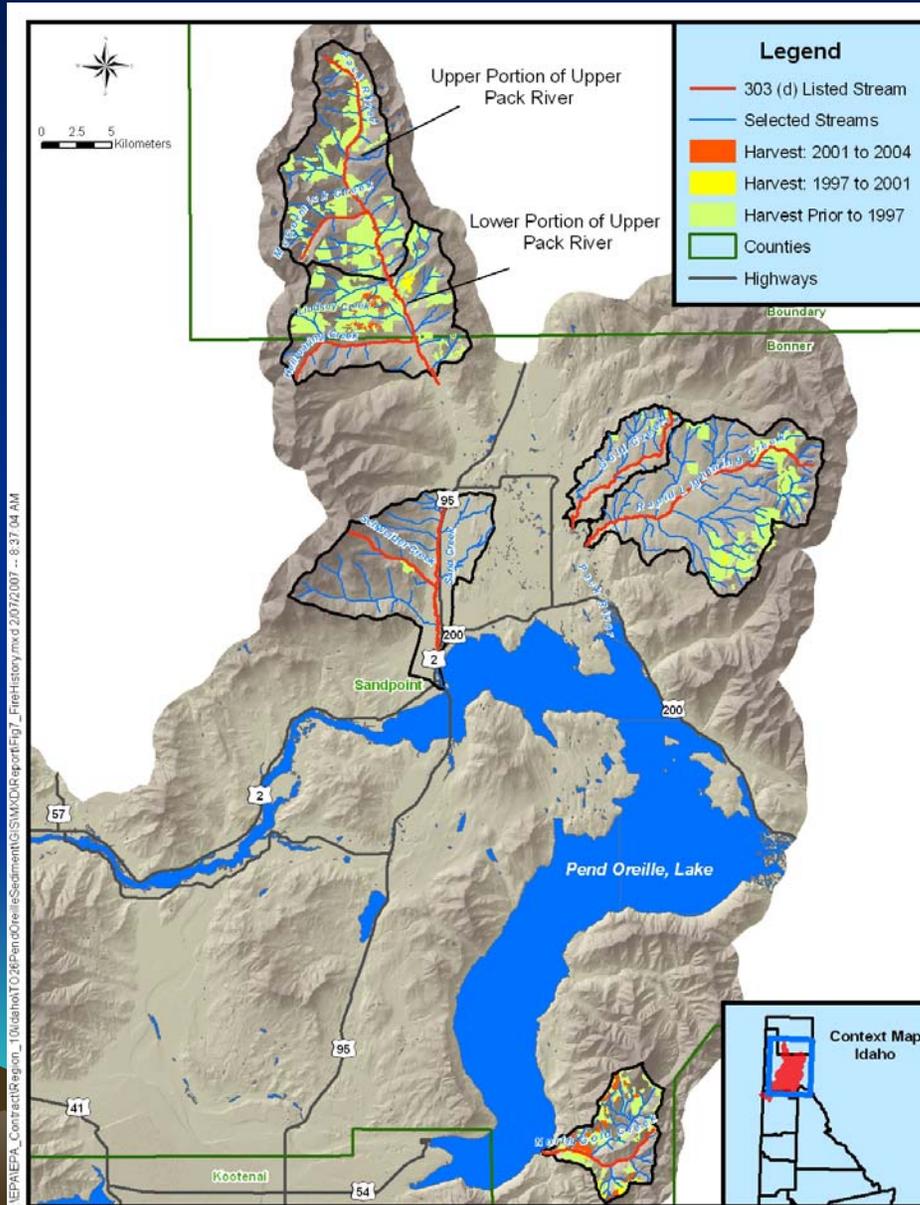
- Forest – Burned Areas
 - Burned between 2004 through 2006
 - Burned between 2001 through 2003
 - Burned between 1997 through 2000
- Mass Wasting
- Road Encroachment
- Streambank Erosion



ROAD ANALYSIS



FOREST HARVEST MAP

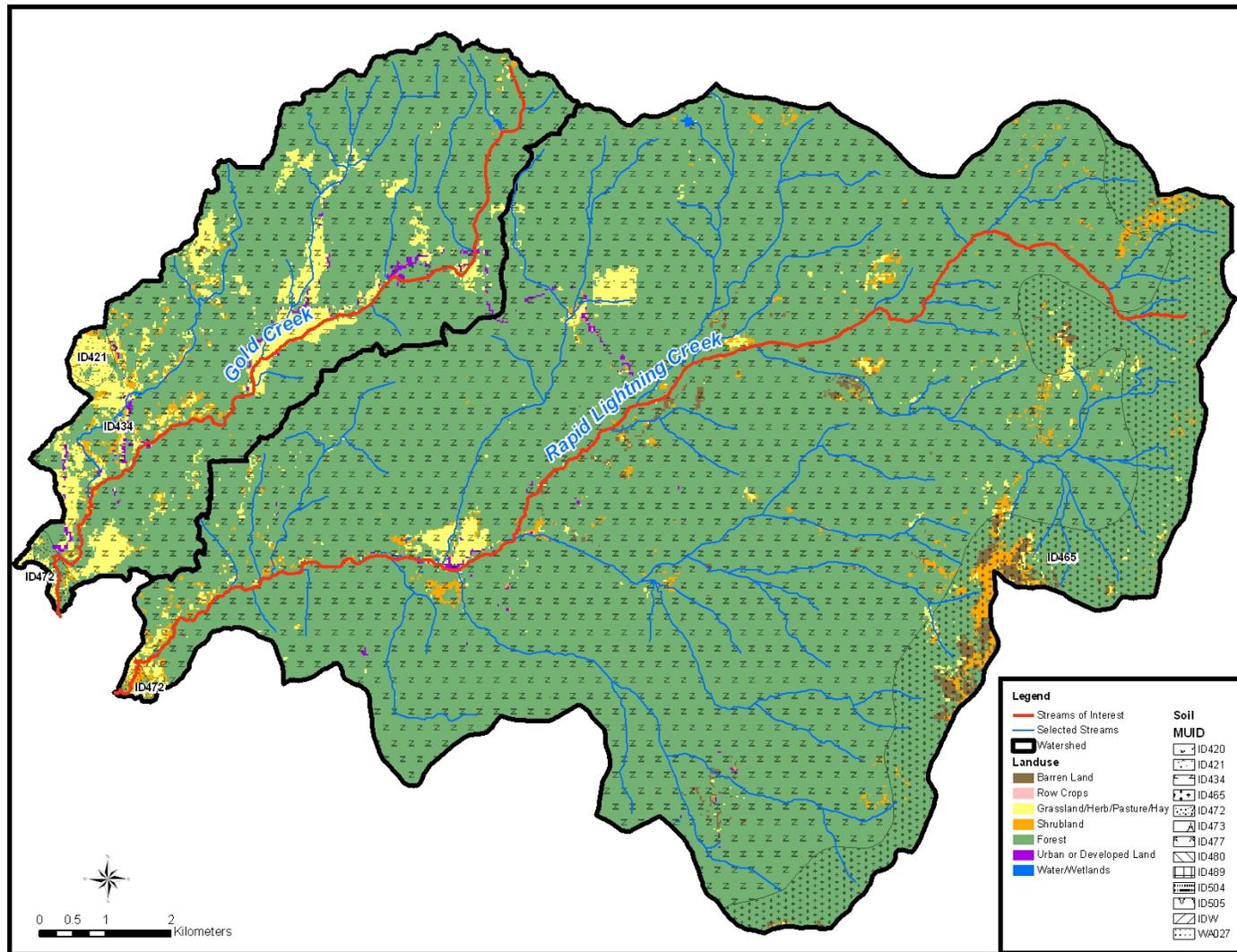


TARGET DEVELOPMENT

- TARGET SEDIMENT LOAD NEEDED TO MEET STREAM BENEFICIAL USES
- TRESTLE CREEK
 - Local
 - Currently Unimpaired
- DATA AVAILABLE

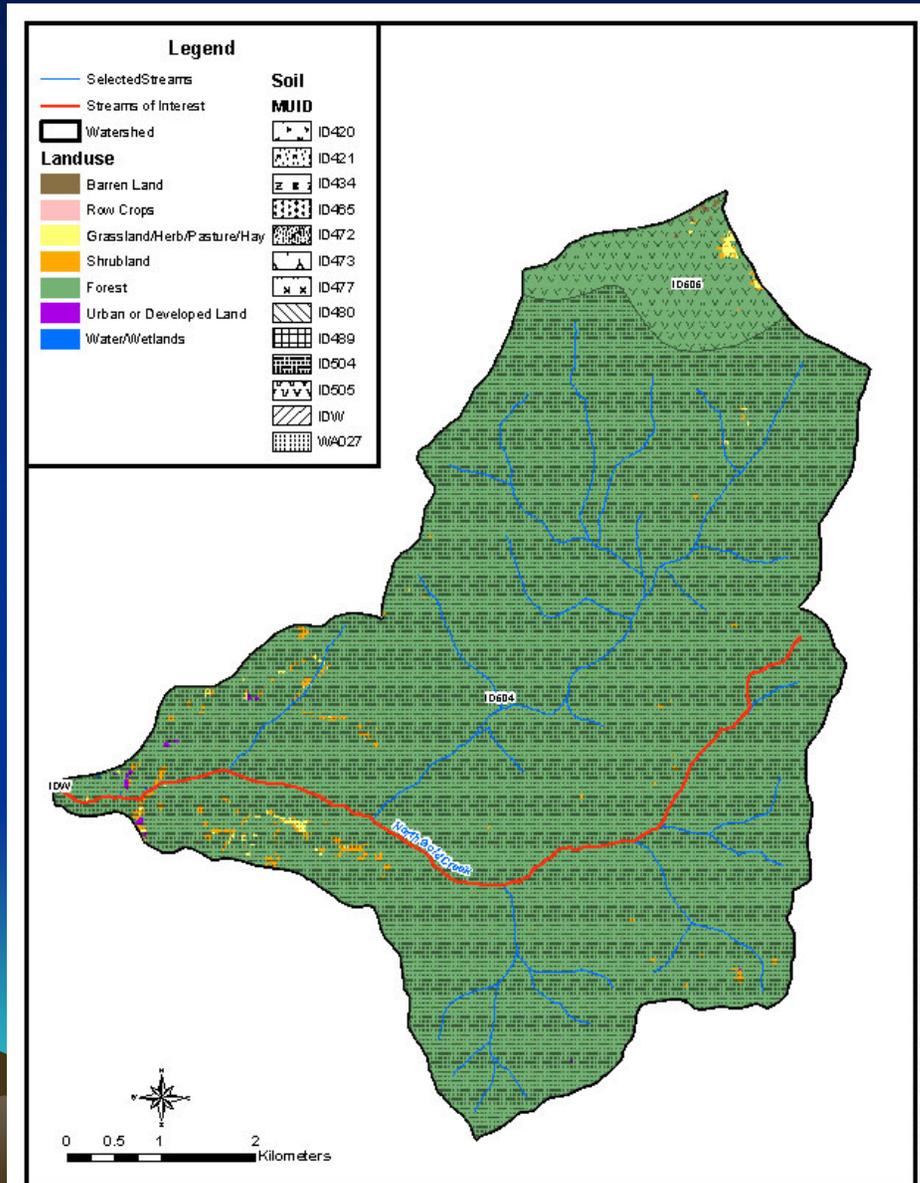


LAND USE MAP – RAPID LIGHTNING AND GOLD CREEKS



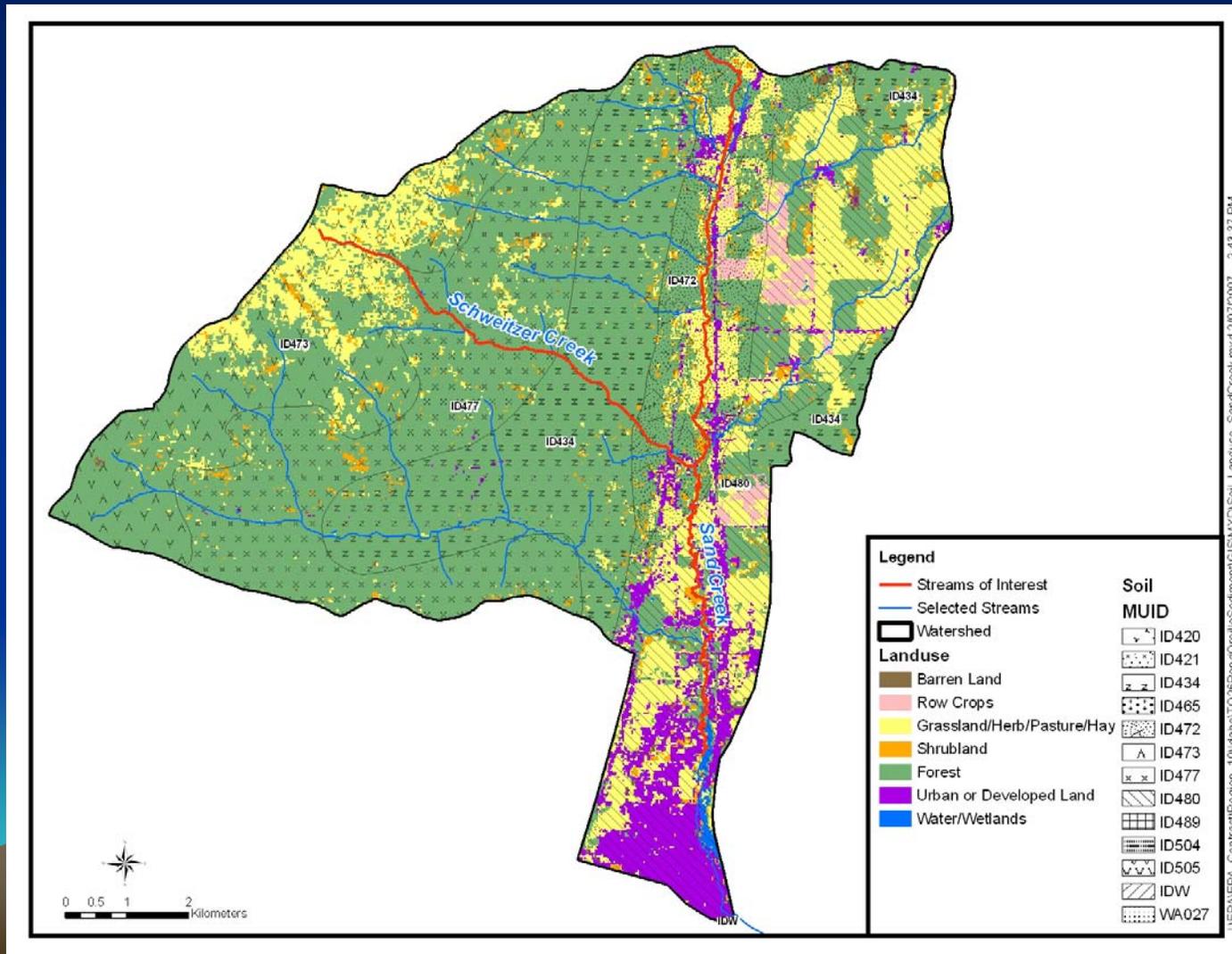
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LAND USE MAP – NORTH GOLD CREEK

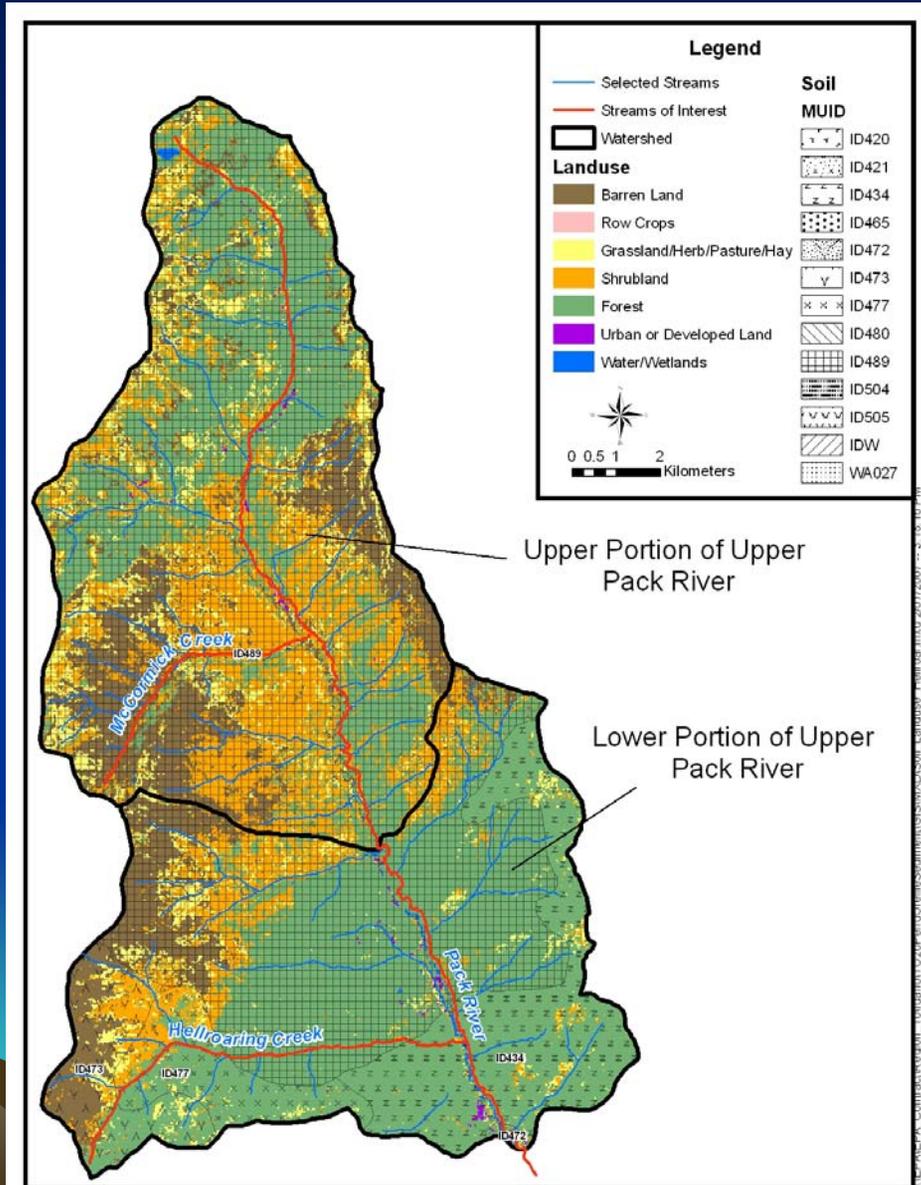


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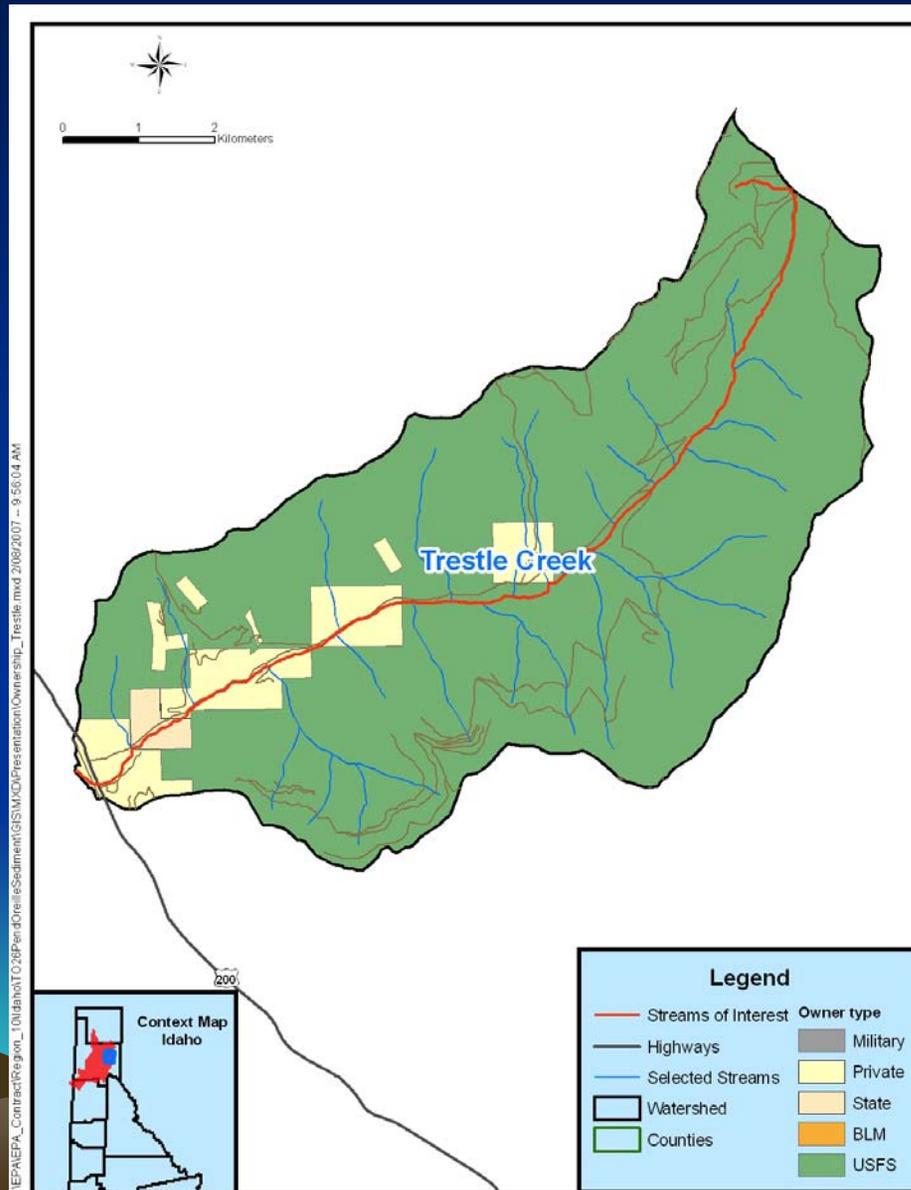
LAND USE MAP – SAND AND SCHWEITZER CREEKS



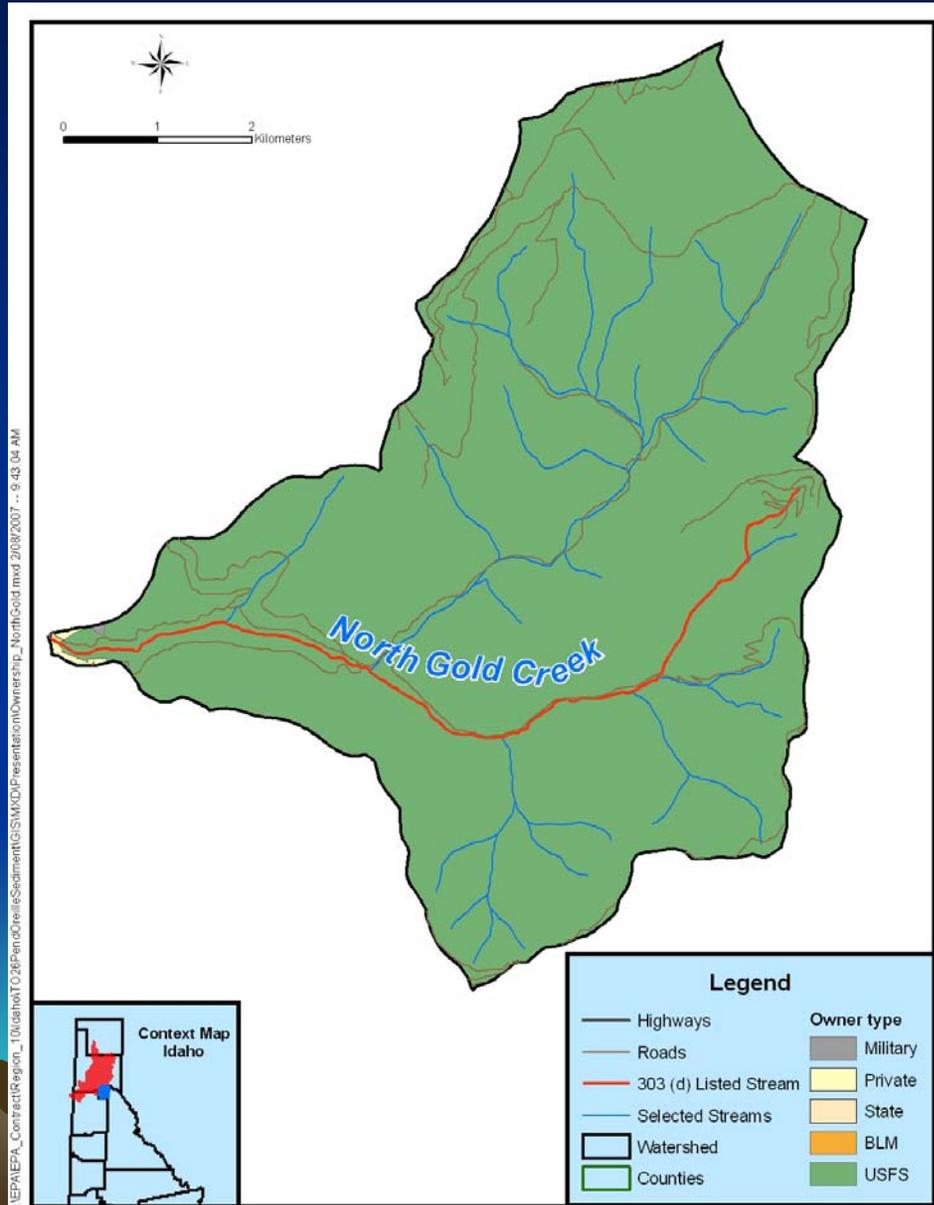
LAND USE MAP – UPPER PACK RIVER



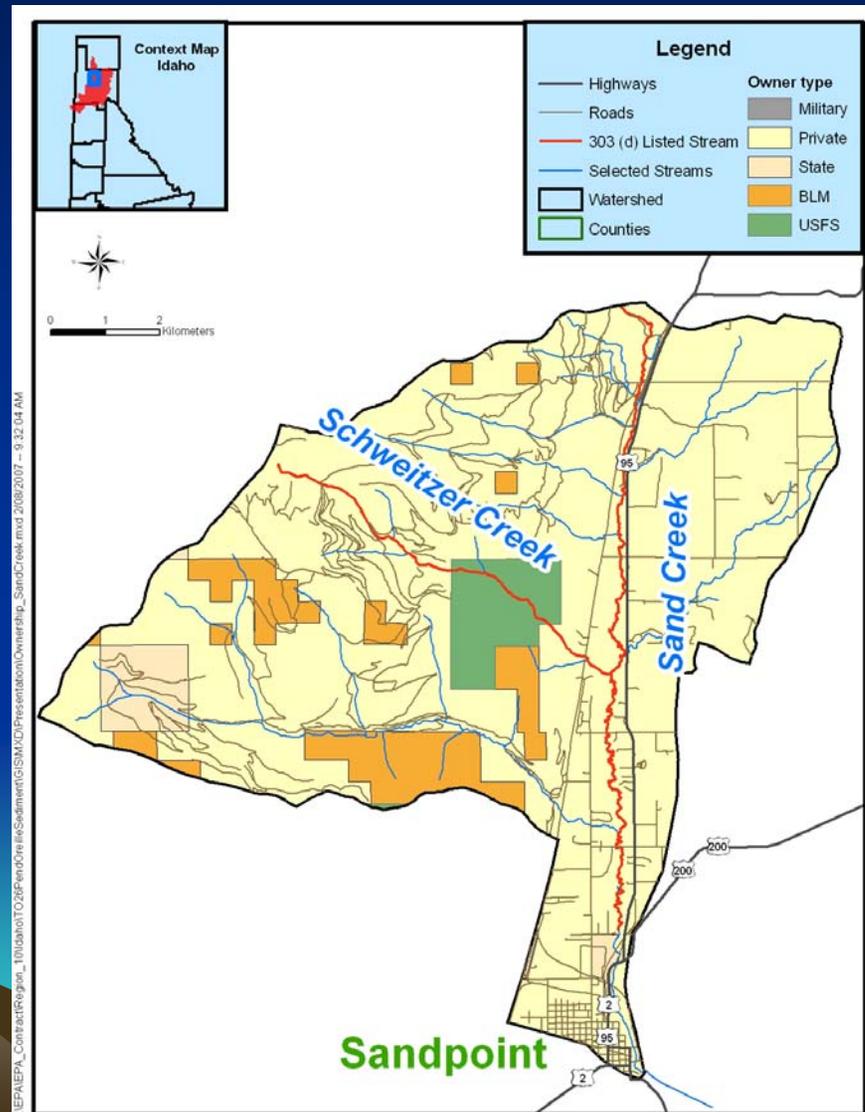
LAND OWNERSHIP - TRESTLE CREEK



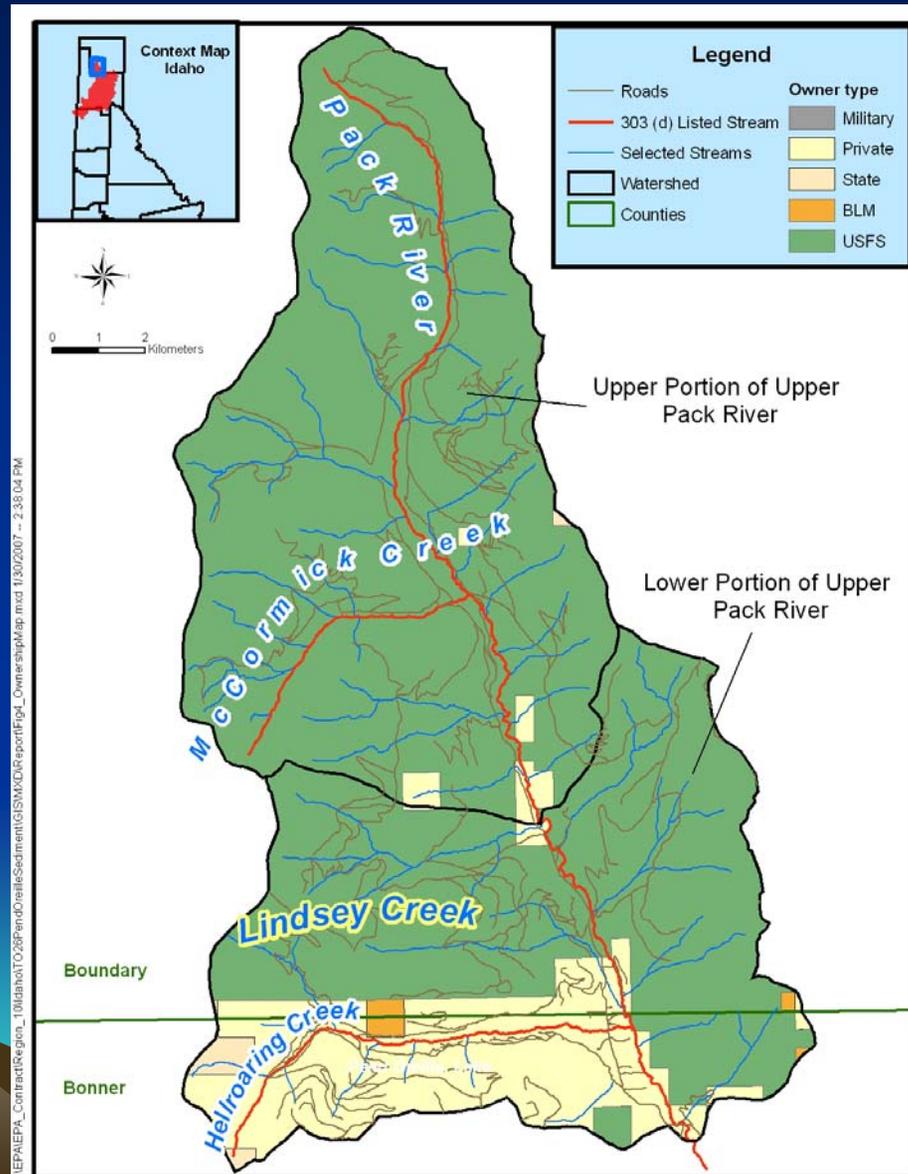
LAND OWNERSHIP - NORTH GOLD CREEK



LAND OWNERSHIP - SAND AND SCHWEITZER CREEKS



LAND OWNERSHIP – UPPER PACK RIVER



WATERSHED LOAD REDUCTION

LAND TYPE	SEDIMENT LOAD (tons/year)					
	GOLD CREEK	LOWER UPPER PACK RIVER	NORTH GOLD CREEK	RAPID LIGHTNING CREEK	SAND AND SCHWEITZER CREEK	UPPER UPPER PACK RIVER
Forest	151	367	220	692	379	232
Forest - Harvested	0	398	435	4	0	0
Forest - Burned	0	0	0	0	0	0
Cropland	0	0	0	0	199	0
Pastureland	6	16	1	4	127	67
Shrubland	3	64	1	13	18	177
Urban	18	12	2	9	409	11
Unpaved Roads	30	89	55	98	185	80
Mass Wasting	0	88	0	0	0	529
Road Encroachment	17	51	39	110	87	40
Streambank Erosion	122	0	1	51	399	0
Total Existing Load	347	1086	754	983	1802	1137
Load Capacity @ 34% Above Background	242	664	343	964	753	638
Load Reduction	106	424	411	33	1,066	499