

APPENDIX 5 - 4

ENERGY RESOURCES

ENERGY: 2A - 3B

Location - Quality - Quantity:

Some hydroelectric electric energy is being produced in the County. Hells Canyon Dam is one utilized hydroelectric site. Unlike other energy sources, hydroelectric energy is relatively inexhaustible. Aside from Hells Canyon Dam, the potential is largely untapped, but the need for protection of the resource is recognized. The potential locations as provided by the geological survey are shown below.

POTENTIAL HYDROELECTRIC-ELECTRIC SITES 1

LOCATION				CAPACITY	
SITE	TOWNSHIP	RANGE	SECTION	STREAM	(KW)
	P	E			
Horse Ranch	2S	41E	03	Minam River	16,000
Little Minam	1N	41E	07	Minam River	27,300
Aneroid Lake	4S	45E	16	East Fork Wallowa River	1,800
Wade Gulch	1S	43E	24	Wallowa River	8,000
Cold Spring	1S	43E	27	Lostine River	11,000
Bear Creek	1S	42E	10	Bear Creek	3,500
Wallowa	2N	42E	31&32	Wallowa River	47,500
Viewpoint	3N	45E	26	Joseph Creek	5,100
Paradise	5N	45E	11	Joseph Creek	1,900
Imnaha Falls	5S	46E	26	Imnaha River	4,800
Cloverdale	5S	47E	23&26	Imnaha River	8,200

The power capacities of the sites were calculated by using gross head and mean flow at 100 percent efficiency. An energy-equivalent calculation shows that this power would equal 1.2 million barrels of oil annually.

CONFLICTING USES: Potential hydroelectric-electric sites that have been identified are located in areas zoned for resource management and in Federal ownership. Conflicting uses are uses which, if allowed, could negatively impact a potential hydroelectric-electric site or eliminate the site as a potential hydroelectric-electric site.

All of the identified potential sites are managed by the

Federal government for resource use. Resource usage at the sites is not a conflicting use as long as the original character of the area is preserved.

Scenic River designation is a potential conflicting use in that upon designation as a Scenic River a site is no longer available. The Minam River has been designated as a State Scenic Waterway and the Snake River a Federal Scenic/Wild River and have no conflicting uses (2A site). The Grande Ronde, Imnaha, Lostine, Wallowa, and Wenaha Rivers are potential scenic rivers. If designated scenic, those sites would no longer be available for hydroelectric-electric development.

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The potential economic impact of allowing conflicts to occur at a site would be the increased cost of developing another site (if the site were rendered not developable) or the increased cost of construction, operation, and maintenance of a facility. If several sites were no longer viable for hydroelectric-electric power generation, there would be increased costs associated with growing dependency on non-renewable energy resources outside the area.

The potential energy impact of allowing conflicting uses to occur would be the area's growing dependency on other forms of energy. Other forms of energy may not be renewable, and once the energy is consumed, it will be gone forever. On the other hand, hydroelectric-electric power is a renewable source of energy.

The social impact of allowing conflicting uses would be negligible. However, there could be some social impacts as a result of the economic and energy impacts that would result from allowing conflicting uses.

Hydroelectric-electric sites are not allowed on the Snake and Minam Rivers which are designated scenic rivers. If hydroelectric development is proposed on a river designated as a potential scenic river, a plan amendment will be required. The Goal V administrative rule will be applied at the time a proposal is made.