

**CHELAN PUBLIC UTILITY DISTRICT
LAKE CHELAN HYDROELECTRIC PROJECT NO. 637
STUDY PLAN OUTLINE**

PROJECT LANDS MANAGEMENT & AESTHETICS

Study Goals

- Assess adequacy of Chelan PUD's Project lands management and aesthetics process for reviewing, evaluating, and permitting (or seeking FERC approval) for development within Project boundary.

Issues to be Addressed

<u>Issue</u>	<u>Rank</u>	<u>Group</u>
Shoreline issues: protection of shoreline	LARC	1/149
Planning: coordination and communication of this and other public planning	LARC	2/149
Economics: long-term ramifications, who maintains/funded how?	LARC	5/149
Planning: integrated resource management as it relates to land use	LARC	7/149
Planning: consideration into distant future	LARC	8/149
Planning: integrate with other resource objectives	LARC	13/149
Planning: development of shoreline	LARC	14/149
Planning: consider changing demographics	LARC	19/149
Planning: limits of acceptable change	LARC	20/149
Economics: must be economically viable to PUD	LARC	31/149
Land Use: spawning habitat, disruption and access to	LARC	39/149
Erosion: loss of land	LARC	50/149
Planning: anticipate future pressure from Puget Sound, etc.	LARC	54/149
Planning: land conversions, lands that are changed for alternate uses (affects habitat)	LARC	55/149
Planning: seasonal flow augmentation (t/e species)(bypass reach and Columbia River)	LARC	56/149
Economics: impact of pool changes on fishing (tourism)		
Erosion: impacts on riparian	LARC	61/149
Recreation: trails and coordinated trails planning	LARC	63/149
Economics: upper lake recreation, distant draw downlake more local		65/149

Issues to be Addressed

<u>Issue</u>	<u>Rank</u>	<u>Group</u>
Shoreline issues: retaining wall encroachment and boat docks	LARC	66/149
Bypass Reach/recreation: appropriate minimum flows	LARC	67/149
Economics: fiscal needs of affected agencies	LARC	69/149
Economics: lack of year-round economic base	LARC	74/149
Planning: archeological (includes traditional cultural uses)	LARC	82/149
Planning: disruptions of aesthetics	LARC	83/149
Commercial Impacts: aesthetics	LARC	84/149
Land Use: vegetation manipulation	LARC	95/149
Economics: can this be done in a way that generates new jobs for our people?	LARC	96/149
Recreation: shoreline casements	LARC	126/149
Planning: irrigation projects	LARC	141/149
Land development control	Fish	5/119
Land development - affecting water quality, fisheries:	Fish	26/119
Comprehensive land management plan	Fish	27/119
Land development – affecting water quality, fisheries:	Fish	56/119
Boats/people		
Woody debris:	Fish	77/119
Water rights	Fish	82/119
Land development - affecting water quality, fisheries:	Fish	86/119
Agricultural runoff		
Land development - affecting water quality, fisheries: Domestic use	Fish	87/119
Timing of the drawdowns: no bath tub ring during high visit season	Public	4/75
Integrated resource management as it relates to land use	Public	5/75
Economics of changing drawdown times	Public	11/75
Partnership with PUD agency to agency to share expertise, such as state grants, street-ends, others	Public	12/75
Planning: development of shoreline	Public	17/75
Debris	Public	19/75
Impact of project operation on economic base	Public	26/75
Loss of soil/land	Public	27/75
Lack of year-round economic base	Public	29/75
Coordination and communication of this and other public planning	Public	33/75
Shoreline access (undercut banks)	Public	41/75
Irrigation and pumping capabilities	Public	42/75

Issues to be Addressed

<u>Issue</u>	<u>Rank</u>	<u>Group</u>
Centralization of information	Public	44/75
Long-term ramifications, who maintains, funded how	Public	47/75
Erosion during high water	Public	48/75
Shoreline erosion caused by raising of the lake	Public	49/75
Structural damage, wear and tear on docks, special docks required	Public	50/75
Bio-engineering, rip rap, erosion control	Public	51/75
Stehekin aesthetics regarding the mud flats	Public	56/75
Navigation on Stehekin River	Public	59/75
Aesthetics - drawdowns ugly	Public	62/75
Land development control	Public	65/75
Must be economically viable to PUD	Public	68/75

Information Needs

- Update shoreline erosion inventory
- Inventory docks, piers, buoys, water intakes, etc. Global Satellite Positioning (GPS) locations will be identified for each land use category.
- Review current Project permit status

Level of Analysis

- Data collected will be entered into a GIS based mapping of land uses with appropriate information logged by site (including digital photographs where appropriate).
- Review applicable federal, state, and local land management plans to determine compatibility of Chelan PUD's land management assessment with regard to environmental, aesthetic, and recreational considerations.
- Evaluate aesthetics of all potential flow releases.