



ROCKY REACH SOCIOECONOMIC STUDY

PROGRESS BRIEFING

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ROCKY REACH SOCIOECONOMIC STUDY

STUDY PURPOSE

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OVERVIEW

- Rocky Reach - Project Economics
- Impacts of Project Operation
- The City of Entiat & Entiat School District Project Impacts

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Rocky Reach - Project Economics

- Historical Operations -- 1978 - 1998
 - Costs
 - Generation
- Forecasted Costs 1999 - 2056
 - Operating
 - Capital
 - Relicensing

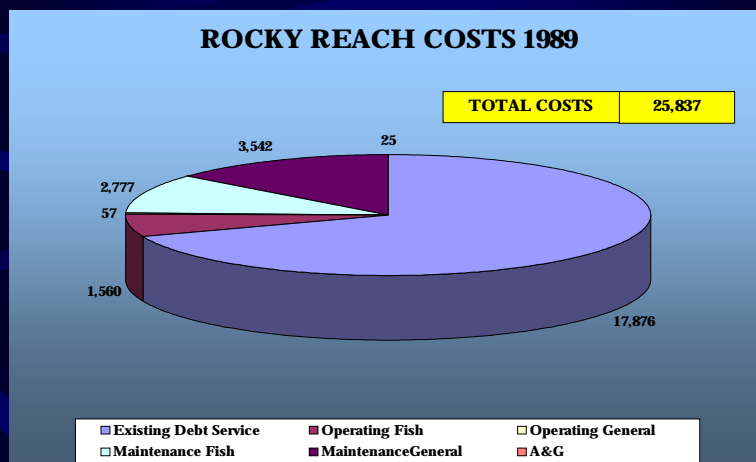
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Rocky Reach - Project Economics Key Issues

- Relicensing Costs
- Cost Escalation
- Dam Maintenance
- River Operation - NMFS, ESA, etc.

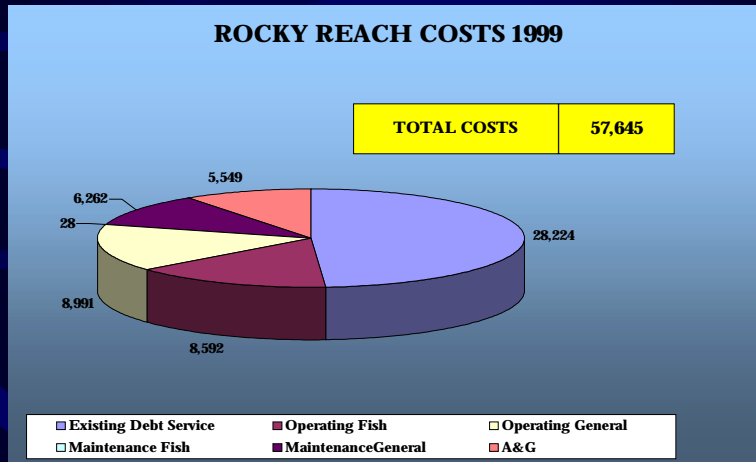
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Rocky Reach - Project Economics



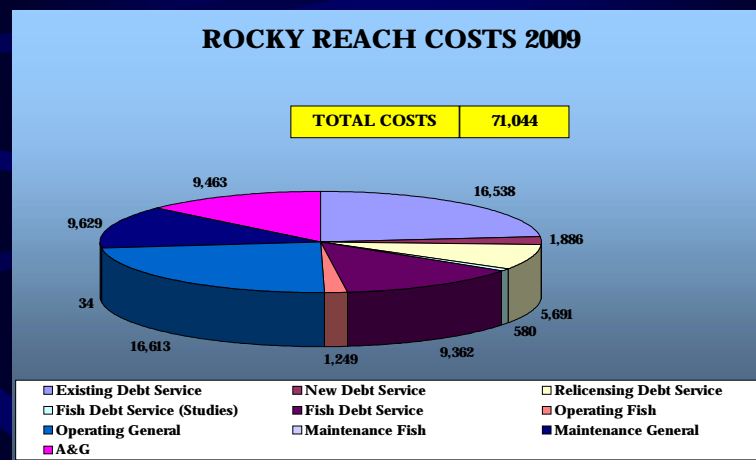
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Rocky Reach - Project Economics



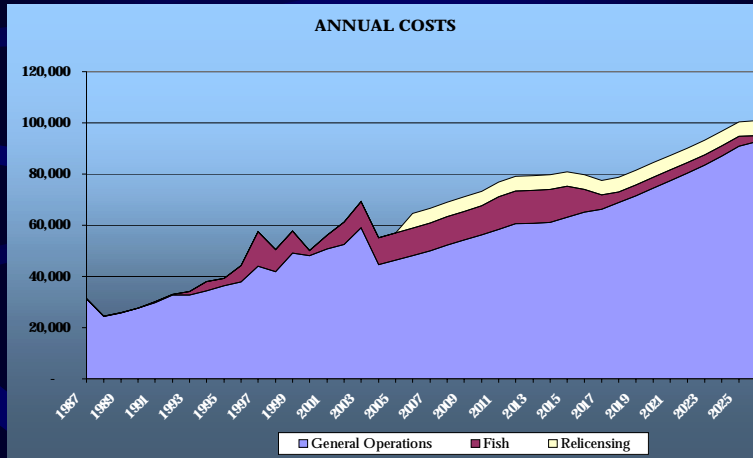
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Rocky Reach - Project Economics



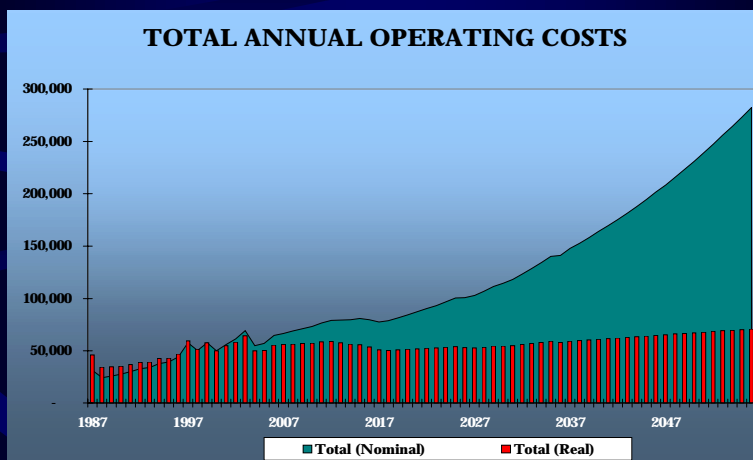
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Rocky Reach - Project Economics



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Rocky Reach - Impacts of Project Operation

- Regional Baseline
- Socioeconomic Impacts

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Rocky Reach – Regional Baseline

- Two County Region Analysis
 - Population Trends & Characteristics
 - Labor Market Trends & Employment Structure
 - Personal Income
 - Communities
- Energy & Water Dependent Sectors
 - Agriculture
 - Aluminum
 - PUD
 - Recreation

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Rocky Reach - Baseline Agriculture

Estimates of Output, Employment, Wages and Salaries from Tree Fruit Production in Columbia River Corridor Adjacent to Rocky Reach Dam in 1999

Economic Effects	Agricultural Fruits Sector	Canning & Preserving, Frozen Food, Dehydrated Food Sectors	Motor & Rail Transportation Sectors	Total
Output Delivered to Final Demand	\$ 90,148,000	\$ 26,039,841	\$ 4,507,400	\$ 120,695,241
Direct Employment	\$ 899	\$ 164	\$ 49	\$ 1,112
Direct Earnings	\$ 13,987,499	\$ 2,672,551	\$ 1,240,304	\$ 17,900,354
Average Earnings	\$ 15,556	\$ 16,305	\$ 25,475	\$ 16,101
Total Industrial Output	\$ 157,641,808	\$ 38,890,972	\$ 6,882,620	\$ 166,292,089
Total Employment	\$ 2,119	\$ 355	\$ 77	\$ 2,550
Total Earnings	\$ 40,377,964	\$ 5,708,593	\$ 1,855,899	\$ 47,942,456
Average Earnings	\$ 19,055	\$ 16,121	\$ 24,154	\$ 18,803

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Rocky Reach - Baseline Aluminum

Estimates of Gross Output, Employment, Wages and Salaries from Primary Aluminum Production in the Study Area in 1998

Economic Effects	Primary Aluminum Manufacturing Sector	Motor and Rail Transportation Sectors	Total
Estimated Output Delivered to Final	\$171,620,863	\$4,507,400	\$176,128,263
Direct Employment	575	36	611
Direct Earnings	\$31,306,500	\$1,401,698	\$32,708,198
Average Earnings	\$54,445	\$47,628	\$53,533
Total Industrial	\$248,249,578	\$6,610,192	\$254,859,771
Total Employment	1,310	56	1,365
Total Earnings	\$51,517,976	\$1,999,138	\$53,517,114
Average Earnings	\$39,335	\$35,976	\$39,198

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Rocky Reach - Baseline PUD

Estimates of Gross Output, Employment, Wages and Salaries from Electric Power Production at Rocky Reach Dam in the Study Area (1999)

Economic Effects	State and Local Utility Sector	Electric Services Sector	Total
Estimated Output Delivered to Final Demand			
Direct Employment			
Direct Earnings			
	Average Earnings		
Total Industrial Output			
Total Employment			
Total Earnings			
	Average Earnings		

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Rocky Reach - Baseline Recreation

Estimates of Gross Output, Employment, Wages and Salaries from Recreational Activities at the Rocky Reach Project in the Study Area in 1999

Economic Effects	Hotels & Lodging (incl. Camping/ RV) Sector	Eating & Drinking Places Sector	Automobile Repair & Services Sector	General Merchandise Stores Sector	Amusement & Recreation Services Sector	Total	
Estimated Output Delivered to Final Demand	\$5,513,668	\$7,363,531	\$2,334,778	\$4,549,824	\$3,472,234	\$23,234,035	
Direct Employment	188	235	48	123	179	773	
Direct Earnings	\$2,480,048	\$2,376,948	\$1,061,157	\$2,110,208	\$1,256,254	\$9,284,615	
	Average Earnings	\$13,206	\$10,132	\$22,061	\$17,101	\$7,022	\$12,016
Total Industrial Output	\$9,732,176	\$13,907,500	\$3,765,763	\$7,941,263	\$7,555,581	\$42,902,283	
Total Employment	261	346	72	180	250	1,108	
Total Earnings	\$3,789,017	\$4,390,460	\$1,484,240	\$3,125,852	\$2,508,489	\$15,298,057	
	Average Earnings	\$14,523	\$12,704	\$20,672	\$17,347	\$10,042	\$13,802

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Rocky Reach - Socioeconomic Impacts

- Changes in Project Operations
- Industry Impacts
- General Economic Activity and Population Changes

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Rocky Reach - Socioeconomic Impacts Changes in Project Operations

- Best Estimate of Project Operation
- Ability to provide scenario analysis in the future

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Rocky Reach - Socioeconomic Impacts Industry Impacts

- Agriculture
- Aluminum
- PUD
- Recreation

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Rocky Reach - Socioeconomic Impacts

-General Economic Activity and Population Changes

- Employment & Earnings
- Population
- Public Sector Changes

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Rocky Reach - Impacts on the Entiat Area

- Population & Demographics
- General Economic Conditions
- Project Related Revenue Sources
- Potential for Developing & Expanding New Markets
- Analysis of Historical Impacts
- Fiscal Impacts – Property Base Analysis

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Rocky Reach - Impacts of Project Population & Demographics

- Recent Population Trends
 - Slow Growth 1960 – 1980
 - Accelerated Growth 1990 - 1999
- Population Characteristics
 - Age, Sex, Race
 - Average Household Size
 - Population Turnover
- School Enrollment

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Rocky Reach - Impacts of Project General Economic Conditions

- Employment and Occupations
- Income Levels
- Housing Stock and New Construction Permits
- Land Use
- Taxes
 - Property Tax Base and Tax Generation
 - Retail Sales & Use Tax
 - PUD Privilege Tax
 - Other Taxes and Payments

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Rocky Reach - Impacts of Project Project Related Revenue Sources

- PUD Privilege Tax
 - City of Entiat
 - Entiat School District
- Other Taxes and Payments

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Rocky Reach - Impacts of Project Potential for Developing & Expanding New Markets

- Agriculture
- Tourism/Recreation
- Manufacturing
- Construction
- Relevant Constraints
- Comprehensive Land Use and Action Plans
 - Land Availability and Zoning
 - Infrastructure Capacity and Needs

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Rocky Reach - Impacts of Project Analysis of Historical Impacts

- Brief History of City's Relocation
- PUD Planning and Infrastructure Assistance
- Population Impacts
- Economic Impacts
 - Private Sector
 - Public Sector
 - * Property Base and Tax Impacts
 - * PUD Privilege Tax Distributions
 - * Fiscal Impacts
- Social Impacts

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Rocky Reach - Impacts of Project Cumulative Impacts

- Other Agency Actions Anticipated
 - Wells Dam Re-licensing
 - USFS Timber Harvest Policies and Plans
 - Lake Chelan Dam Re-licensing
 - BLM Policies and Plans
 - WA Agencies
- Cumulative Socioeconomic Impacts

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