



Lloyds Shoals/Lake Jackson FERC Relicensing (FERC No. 2336-094)

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Introduction

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Project Location (+)





Physiography



Project Boundary

- Project Boundary
- Georgia Power Project Recreation Facilities
- Public/Private Recreation Access



Lloyd Shoals Dam Lake Jackson

Lloyd Shoals Project (FERC No. 2336)



Generating Capacity	18 MW
Number of units:	6 (horizontal, Francis-type)
Max. hydraulic capacity:	620 cfs/unit or 3,720 cfs total plant capacity
Full reservoir storage:	107,000 acre-feet
Normal operating range:	527 to 530 feet
Average annual inflow:	1,732 cfs
Operation mode:	Modified run-of-river
Minimum flow:	400 cfs or inflow, whichever is less
Spillway Capacity:	16,770 cfs





Project Facilities and Recreation Access









Reservoir Storage and Effect on Operations Small Reservoirs – Run-of-River Operation



- No storage
- Run-of-River Inflow = outflow all the time
- Example: old mill sites where steady power was more important than peaking power



 Project purpose: steady power or no power



Reservoir Storage and Effect on Operations Medium Reservoirs – Modified Run-of-River Operation



- Some storage
- Water is stored for hours or days
- Inflow ≠ outflow hourly or daily



- Water is released for the week
 Inflow = outflow on a weekly basis
- Example: Lake Jackson (useable storage = 74,750 acre-feet)
- Project purpose: power generation



Reservoir Storage and Effect on Operations Large Reservoirs – Storage Operation



- Significant storage
- Water is stored for months or years Inflow ≠ outflow
- Capture flows during high flow periods for use in low flow periods



https://media.defense.gov/2017/Nov/29/2001849723/-1/-1/0/171129-A-CE999-006.JPG

- Example: Lake Lanier (Useable Storage = 1,087,600 acre-feet)
- Project purposes: power generation, flood control, navigation, and recreation



Hydroelectric Project Purpose Comparison





Large Drainage Basin – Small Amount of Storage







Lloyd Shoals Operations Example NORMAL Inflow Week of 1,547 cfs, Average Annual Inflow = 1,732 cfs





Lloyd Shoals Operations Example **DROUGHT** Period of 313 cfs, Average Annual Inflow = 1,732 cfs





Lloyd Shoals Operations Example HIGH Inflow Period of 17,544 cfs, Average Annual Inflow = 1,732 cfs



Resource Areas Considered by FERC during Relicensing



- Operations
- Recreation and Land Use
- Terrestrial, Wetland, and Riparian Resources
- Rare, Threatened, and Endangered Species
- Water Resources
- Fish and Aquatic Resources
- Geology and Soils
- Cultural Resources



Study Plan Development Schedule







Questions

