Alaska Power Authority Susitna Hydroelectric Project

Issues List

March 6, 1984

Fishery Issues (F)

- F-1. Significance of altered flow regime on salmon and resident fish habitats and populations downstream of the dams, including effects on migration/access, spawning, and rearing during summer months, and effects on incubation and rearing during winter months.
- F-2. Significance of changes in water quality parameters (turbidity, pH, heavy metals, dissolved nitrogen, temperature, nutrients) on salmon and resident fish habitats and populations downstream of the dams.
- F-3. Significance of altered ice processes on salmon and resident fish habitats and populations downstream of the dams, including effects on fish access and changes due to staging.
- F-4. Significance of changes in stream morphology on salmon and resident fish habitats and populations downstream of the dams.
- F-5. Significance of impoundment effects on resident fish habitat and populations upstream of the dams.
- F-6. Significance of physical effects of access corridors on fish habitats.
- F-7. Significance of physical effects of transmission line corridors on fish habitats.
- F-8. Significance of water quality and quantity effects of construction camp and permanent village on fish habitats.
- F-9. Significance of water quality and stream morphology effects of borrow and spoil areas on fish habitats.
- F-10. Significance of disturbance effects of human instream activities on fish.
- F-ll. Feasibility and desirability of specific mitigation options, including structural modifications, flow allocation, physical habitat modification, hatcheries, and management options.
- F-12. Formulation and implementation of post-construction plan to monitor significant impacts and the efficacy of specific mitigation measures.

Wildlife Issues (W)

- W-1. Significance of reduction in moose carrying capacity directly attributable to the project.
- W-2. Significance of reduction in black bear denning and foraging habitat.
- W-3. Significance of reduction in brown bear spring foraging habitat.
- W-4. Significance of habitat reduction for middle basin furbearers and birds.
- W-5. Significance of Dall sheep habitat modification at Jay Creek lick.
- W-6. Significance of increase in accidents and inhibition of movements of big game mammals due to reservoir open water and ice conditions.
- W-7. Significance of inundation or other disturbance to bald eagle, golden eagle, and other raptor nests.
- W-8. Significance of changes in wildlife habitat and movements downstream of the dams due to changes in flow and ice cover.
- W-9. Significance of reduction in wildlife habitat due to construction camps/villages, permanent town, and airstrips.
- W=10. Significance of access road presence and use effects on caribou movements and behavior.
- W-11. Significance of increased accidental big game deaths from vehicle collisions due to increased access.
- W-12. Significance of reductions in big game and furbearer populations from increased hunting/trapping pressure due to increased accessibility of project area.
- W-13. Significance of other disturbances to wildlife due to human activities, such as aircraft overflights and construction noise.
- W-14. Formulation and implementation of construction worker transportation plan.
- W-15. Formulation and implementation of post-construction access policy.
- W-16. Feasibility and desirability of refinement of timing of construction and operation activities to reduce wildlife impacts.
- W-17. Feasibility and desirability of specific mitigation options, including moose and bear habitat enhancement, Jay Creek lick expansion, raptor nest habitat enhancement, revegetation of disturbed areas, downstream beaver habitat enhancement.

- W-18. Feasibility and desirability of types of mitigation options, including design or structural modifications, replacement lands/habitat, enhancement of lands/habitat, rehabilitation of disturbed lands, management options (scheduling or restrictions) to reduce disturbance or direct impacts, preventive measures.
- W-19. Formulation and implementation of post-construction plan to monitor significant impacts and the efficacy of specific mitigation measures.

Recreation Issues (R)

- R-1. Significance of impacts on fishing, including availability of fish, access, and quality of experience.
- R-2. Significance of impacts on hunting and recreational trapping, including availability of resource, access, and quality of experience.
- R-3. Significance of loss of whitewater resource.
- R-4. Significance of impacts to boating downstream of Devil Canyon Dam, including access to the water and on the water (impediments to navigation).
- R-5. Significance of impacts on non-consumptive activities (e.g., bird-watching and hiking), including availability of the resource, access to the resource, and quality of experience.
- R-6. Significance of recreational activities of project construction workers on fish and wildlife resources in the Susitna River watershed.
- R-7. Formulation and implementation of a specific recreational opportunities/recreation plan.
- R-8. Feasibility and desirability of restrictions of recreational opportunities in order to reduce impacts to fish and wildlife resources in the Susitna River watershed.

Aesthetic Issues (AE)

- AE-1. Significance of impacts of borrow and spoil areas, transmission lines, access roads and rail lines, construction camps and villages, and dams on scenic resources.
- AE-2. Feasibility and desirability of incorporating specific aesthetic mitigation measures into project plans.

Cultural Resource Issues (C)

- C-1. Identification and significance of loss of affected cultural/ historical sites.
- C-2. Formulation and implementation of cultural resources mitigation plan.

Air Quality Issues (AQ)

- AQ-1. Significance of ambient air quality impacts during project construction.
- AQ-2. Formulation and implementation of air quality mitigation measures.

Dam Safety Issues (D)

- D-1. Determination of significance of risk and effects of catastrophic dam failure.
- D-2. Formulation of emergency warning plan.

Socioeconomic Issues (S)

- S-1. Significance of changes in subsistence opportunities relating to fish and wildlife resources in the Susitna River watershed.
- S-2. Significance of project impacts on life style in area communities.
- S-3. Significance of changes in commercial opportunities related to fishing, hunting, trapping, etc.
- S-4. Significance of changes in employment in area communities.
- S-5. Significance of increased burden on Mat-Su Borough and affected communities for providing public services and facilities in response to project-related demands.
- S-6. Significance of secondary development impacts on Native corporation undeveloped lands.
- S-7. Feasibility and desirability of specific mitigation options, including worker transportation plan, worker housing plan, local aid plan, local hire plan.
- S-8. Formulation and implementation of a construction and post-construction plan to monitor significant impacts and the efficacy of specific mitigation measures.

Land Acquisition Issues (L)

I.-1. Development of a feasible and desirable land acquisition program.