



Au Sable River

Riparian Management Overview

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i.e., a dirt forester



Importance of Hydro Generation

- Renewable source of energy
- Collectively, Au Sable dams are capable of generating 41 Megawatts (MW) of electricity
- This could power 33,000 homes using national average energy use rates
- 4 of the 6 dams have operated for over 100 years



Generating units at Mio Dam

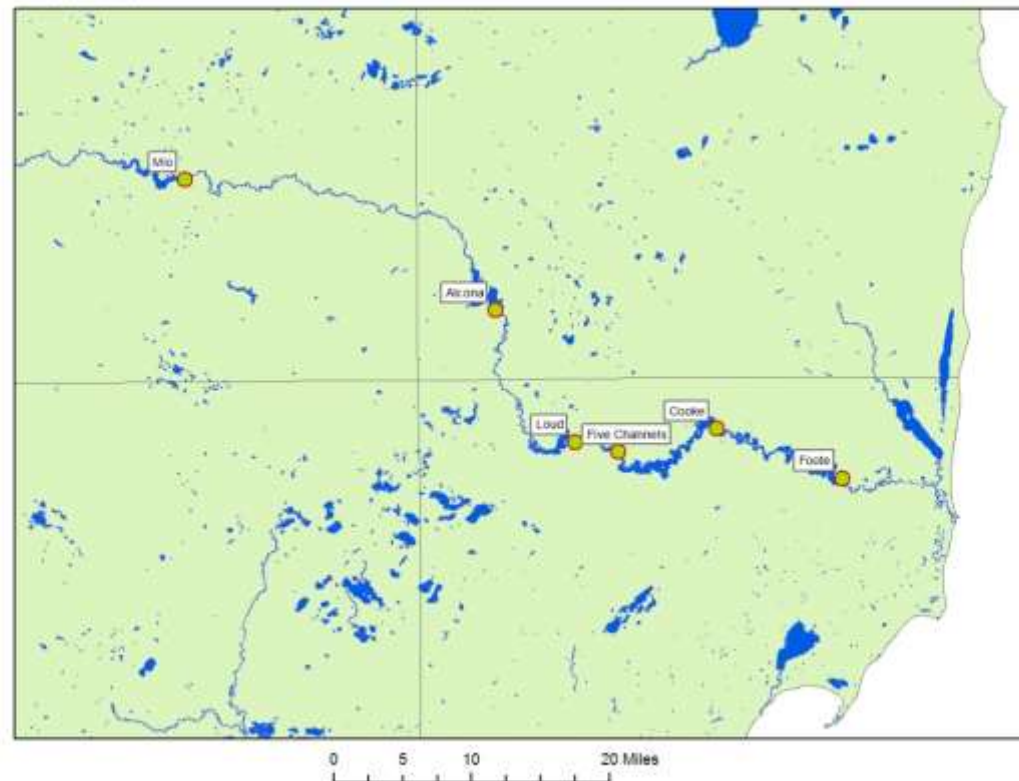
Au Sable Ownership

Au-Sable
3,531 acres

- Mio (895)
- Alcona (655)
- Loud (144)
- Five Channels (323)
- Cooke (225)
- Foote (1,289)



River-Hydro Generating Stations



Prepared for the 2017 MISAF Fall Conference

*Surface acres of impoundments not included



Resource Stewardship

- Between 1924-1972 CPCO planted over 21 million trees across 24,000 acres of riverine corridors
- Since relicensing in 1994 Consumers Energy has provided over \$8.6 million to the DNR Fish Habitat Improvement Account (HIA)
- This money funds fisheries research, habitat improvement, and fishing access projects throughout Michigan



Governance of activities

- In 1994, projects along the Au Sable were re-licensed to operate for a 40-year period by the Federal Energy Regulatory Commission (FERC)
- A land management plan (LMP) with input from several stakeholder groups was developed as part of the license for each project
- Forest management is mainly concerned with maintenance of RMZ/buffer zone and bald eagle habitat



Several other stakeholder groups were also influential in creating the LMPs

Forest Management

Au Sable Overview



General Management Practices

- Snag retention in all harvests (unless risks to power distribution, public safety, or the residual stand exist)
- Large amount of coarse wood left after harvest
- Slash mat / Corduroy major skid trails
- No harvest buffer 50' from impoundment edge with a Riparian Management Zone (RMZ) extending 150' further with management dependent on site factors and goals
- MDEQ best management practices for timber harvesting followed on all harvests
- All stream crossings permitted as required by law

Aspen Management

- Residual stems spread across stand or clustered
- Between 10-40 sqft/acre of residuals
- Residuals consisting of large canopy oak, several species of hardwood poles/small timber, and pine of varying sizes





Red Pine Thinning

- Target Basal area
~90-110 sqft/ac
- Moderate thinning
from below
- Thinning to the B
line
- Long term
development of high
quality stems for
residuals



Recreation resources

Available Recreation

- Public access (No ORV's)
- Portages*
- Boat launches
- Campgrounds
- Day use areas
- Fishing access
- Hunting access (no blinds or stands permitted)

*portages are always free use

Both Free and Fee use areas exist depending on the entity which licenses the infrastructure



Recreation cont.

Operation of each recreation site varies by license holder

- Federal
- State
- Local
- Private



Questions?



Bibliography

Totton, Edward F.. Forest Land Management Objectives and Accomplishments. CPCO Electric Operations Department. 1965

https://www.eia.gov/electricity/sales_revenue_price/pdf/table5_a.pdf

Numerous internal archive sources were also used including,

- Plantation records
- Photography
- Meeting minutes

Agency logos were obtained from the public domain using google.com searches and agency websites