

**7.2-1 Net Creek Dam
(Ministry of Natural Resources)**

| Issue Objective | Option 1 | | | | Option 2 | | | | Rationale for selection of Preferred |
|--|--|--|--|---|--|---|---|----------------------------|---|
| | Target/Existing Voluntary Constraint | Strategy | Benefits | Conflict or Concern | Target | Strategy | Benefits | Conflict or Concern | |
| Fisheries: -operate the dam to maintain or improve the fish habitat during its natural life cycle. Walleye spawning. (1.1.1) | -drawdown initiated last week of Feb. -3 logs out by 2nd week in March -levels are monitored to mitigate flooding potential (freshet) and ensure a balance for adequate water levels for walleye spawning upstream and down stream for the 20 day incubation | -maintain status quo operations to ensure continued protection for walleye and pike spawning habitat/ time period. Draw down initiated last week of February -3 logs out by 2nd week in March | -maintain spawning habitat /conditions for walleye fisheries for upstream and downstream waterbodies | -minimal freshet / low water natural events might impact ability to provide adequate water for upstream and downstream simultaneously | -Option 1 maintains fish habitat | | | | Option 1 maintains appropriate walleye habitat, no option 2 |
| -operate the dam to maintain or improve the fish habitat during its natural life cycle. Trout spawning. (1.1.1, 1.1.2) | | | | | -begin the winter drawdown on September 15 by 30 cm and on Thanksgiving day weekend continue winter drawdown | -initiate the winter drawdown on September 15 by 30 cm to encourage the trout to spawn deeper (Oct) to protect incubation fry movement (Apr) from the final drawdown. -levels are monitored to mitigate flooding potential (freshet) and ensure a balance for adequate water levels for walleye and pike spawning upstream and down stream for the 20 day incubation period post spawn | -fisheries - lake trout -flood mitigation -power production -public safety | -navigation -recreation | Option 2 revised drawdown potential benefit for trout spawning by encouraging deeper spawning |
| -operate the dam to maintain or improve the fish habitat during its natural life cycle. Pike spawning. (1.1.1) | -none | | | | | | | | |
| Navigation: -No issue identified to date | -none | | | | | | | | |
| Recreation: -No issue identified to date | -none | | | | | | | | |
| Flooding: -operate the dam to minimize the risks of damage due to flooding for low lying areas - i.e. Guppyville (1.6.1,1.6.2) | -maintain status quo operations to ensure continued protection for walleye spawning habitat/ time period. Drawdown initiated last week of February -3 logs out by 2nd week in March -levels are monitored to mitigate flooding potential (freshet) | -maintain current operating regime Draw down initiated last week of February -3 logs out by 2nd week in March -levels are monitored to mitigate flooding potential (freshet) | -current operations have proven effective at minimizing flooding potential -minimizes natural flooding of loon habitat -power production at low natural inflow period. | -minor impact on beaver habitat -potential for ice hang up damage to docks if water levels were high when ice formed | -begin the winter drawdown on September 15 by 30 cm and on Thanksgiving day weekend continue winter drawdown | -the winter drawdown on September 15 by 30 cm to avoid disturbing trout spawning and incubation and on Thanksgiving day weekend continue winter drawdown | -fisheries -flood mitigation (docks) | -power production | Option 2 selected: - Improves flood mitigation - Improves trout spawning habitat |
| First Nations: -No issue identified to date | -none | | | | | | | | |
| Cultural Heritage: -No issues identified to date | -none | | | | | | | | |
| Erosion: -No issue identified to date | -none | | | | | | | | |

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| Wildlife: -operate the dam to maintain or improve Loon habitat (1.2.1) -maintain or improve habitat for beavers (1.2.2) | -none -none | | | | | | | | |
| | | | | | -begin the winter drawdown on September 15 by 30 cm and on Thanksgiving day weekend continue winter drawdown | -the winter drawdown on September 15 by 30 cm to avoid disturbing trout spawning and incubation and on Thanksgiving day weekend continue winter drawdown -levels are monitored to mitigate flooding potential (freshet) and ensure a balance for adequate water levels for walleye spawning upstream and down stream for the 20 day incubation period post spawn -establish a communication protocol between the Temagami Area Fisheries Involvement Program and the MNR from April 25th to the end of incubation | -fisheries - lake trout -flood mitigation -power production | -navigation | Option 2 selected: - Improves beaver habitat |
| Economics: - No issue identified to date | - none | | | | | | | | |
| Public Safety: -operate the dam to maximize public safety - late winter draw down has impact on ice conditions near inlet and outlet of dam site - potential snowmobile hazard | -draw down initiated last week of February -3 logs out by 2nd week in March -levels are monitored to mitigate flooding potential (freshet) -normal operating range 295.30 - 296.30 m -absolute range 294.92 - 297.05 m -summer band 296.16 - 296.30 m summer period | -operate dam within the normal operating range on a reasonable effort basis, but use flood allowance to minimize flooding downstream -educate the public | -contributes to public safety | -none | -begin the winter drawdown on September 15 by 30 cm to avoid disturbing trout spawning and incubation and on Thanksgiving day weekend continue winter drawdown -levels are monitored to mitigate flooding potential (freshet) and ensure a balance for adequate water levels for walleye spawning upstream and down stream for the 20 day incubation period post spawn -establish a communication protocol between the Temagami Area Fisheries Involvement Program and the MNR from April 25th to the end of incubation | -fisheries - lake trout -flood mitigation -power production | -navigation | -power production | Option 2 selected: - Improves flood mitigation - Improves trout spawning habitat |
| Power Generation: -operate the dam to maintain or improve power production | - draw down initiated last week of Feb. - 3 logs out by 2nd week in March - levels are monitored to mitigate flooding potential (freshet) - normal operating range 295.30 - 296.30 m - absolute range 294.92 - 297.05 m - summer band 296.16 - 296.30 m summer period | - maintain level of 296.16 m until the walleye incubation is complete | - some hydro production benefits from optimum timing use of stored water during low flow periods. | - potential public safety concern to impact on ice conditions | -remove all voluntary constraints and operate within legal limits to maximize power production | -maximize power production within legal limits | -power production -public safety | -fisheries -recreation -navigation -erosion -wildlife | Option 1 maintains power generation downstream, no Option 2 |
| Natural Flow Regime*: -operate the dam to reflect a natural flow regime | -draw down initiated last week of February -3 logs out by 2nd week in March -levels are monitored to mitigate flooding potential (freshet) -normal operating range 295.30 - 296.30 m -absolute range 294.92 - 297.05 m -summer band 296.16 - 296.30 m summer period | -maintain level of 296.16 m until the walleye incubation is complete | -some power production benefits from optimum timing use of stored water during low flow periods. | - potential public safety concern to impact on ice conditions | Natural Flow Regime data not available for reservoirs. | | | | Option 1 selected due to information gaps regarding natural flow regime data |