

**Guidelines
on the use of
Water Bombers
in
Protected Public Water Supply Areas**

Department of Environment and Conservation, Water Resources Management Division

Department of Natural Resources, Forestry Branch

Department of Transportation and Works, Air Services Division

March 30, 2006

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1. The use of the term "Water Bomber(s)" will be used generally to refer to all types of aircraft (including helicopters using water buckets) that may be employed to fight forest fires in Protected Public Water Supply Areas.
2. With the exception of Gander Lake, all Protected Public Water Supply Areas will be considered "Off Limits" for practice water bombing. Given the size and volume of Gander Lake, and the fact that it has traditionally been used as the Provincial practice area due to its ice free spring conditions and proximity to the base of operations at Gander Airport, it is agreed that a minimum 1000 meter "No Water Pickup" buffer be maintained around the water supply intake for the Town of Gander and the water supply intake for the Towns of Glenwood and Appleton (The Outflow - Gander River).
3. During a practice session, based upon the composition and toxicological information supplied for the two fire fighting foam products currently being used (*FIRE-TROL FireFoam 104* and *PHOS-CHEC WD-881C Class A Foam Concentrate*), neither product should, under any circumstances be intentionally released in a Protected Public Water Supply Area due to the potential for water quality impairment.
4. During a practice session sea water should not be intentionally released in a Protected Public Water Supply Area due to the potential for water quality impairment.
5. During active forest fire fighting, all ponds and lakes in a Protected Public Water Supply Area, with the exception of the intake pond/lake may be used without restriction for "Water Pickup". With the exception of Gander Lake, all other intake ponds/lakes shall be considered as "No Water Pickup" zones. In accordance with Item 2 above, a minimum 1000 meter "No Water Pickup" buffer shall be maintained around the water supply intake for the Town of Gander and the water supply intake for the Towns of Glenwood and Appleton (The Outflow - Gander River). Refer also to Item 10 below.
6. If Forestry or Air Services staff identify other large intake ponds/lakes, in areas where no reasonably close alternative water body is available, Water Resources Management Division may agree to these exceptions outside a 1000 meter "No Water Pickup" buffer around the intake. Intake ponds/lakes with a major axis length of less than 1000 meters shall not be used for "Water Pickup" under any circumstances.

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7. During active forest fire fighting within a Protected Public Water Supply Area, at the sole discretion of the water bomber pilot, or in consultation with the fire boss, it shall be determine if the eminent risk of the forest fire warrants the use of fire fighting foam and/or sea water. Given the potential for impairment of the drinking water quality, foam and sea water should only be used as a last resort, this being particularly important in proximity to the intake pond/lake and smaller sensitive water supply areas. Use of foam and sea water in remote areas of larger water supply areas poses less immediate risk to drinking water quality.
 8. In the event that foam, sea water, fuel, hydraulic oil, or lubricant is intentionally or unintentionally released, or if a water bomber goes down or experiences mechanical failure in a Protected Public Water Supply Area, the incident must be reported immediately by the Department of Natural Resources to the appropriate regional Watershed Management Specialist, who will determine if additional follow-up or water quality monitoring is warranted.
 9. Water Resources Management Division will identify all Protected Public Water Supply Areas, intake ponds or lakes and any other sensitive areas where "Water Pickup" is not permitted. These areas will be identified on the Water Resources Management Division GIS layer as "Water Bomber Exclusions".
 10. Prior to each fire season, Forestry officials should consult Water Resources Management Division GIS layers for latest Protected Public Water Supply Area updates. All Protected Public Water Supply Areas and "No Water Pickup" zones must be identified on mapping that is made available to dispatchers, pilots and fire crews at all units.
 11. Additions and changes to Protected Public Water Supply Areas, or amendments to the "No Water Pickup" zones will be communicated by Water Resources Management Division to appropriate Forestry officials and will be updated as appropriate on the Water Resources Management Division GIS layers.
 12. During active forest fire fighting, based upon the mapping information made available to Forestry, Protected Public Water Supply Areas and "No Water Pickup" zones can be identified by the dispatcher or fire boss and relayed to the water bomber pilots.
 13. At any time, particularly during large forest fires, fires near communities or fires within Protected Public Water Supply Areas, the appropriate regional Watershed Management Specialist, may be consulted with respect to relaxing the "No Water Pickup" zones, or any other aspect related to the fire and its potential impact on drinking water quality.