

Change in spring event timing

Ecological consequences

Absolute changes

Earlier spring discharge



Greater nutrient availability early in the year

Earlier spring chlorophyll



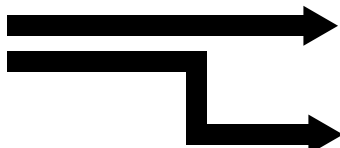
Earlier uptake of nutrients

Earlier onset stratification



Longer growing season

Earlier ice-off



Earlier decline of hypolimnetic oxygen

Longer period of nutrient limitation in epilimnion in summer

Relative changes

Widening gap between ice-off and spring chlorophyll peak compared to onset of stratification



Greater water-atmosphere exchange

More opportunities for species adapted to mixed water columns