| | Mechanical Harvesting | Herbicides |
|---|--|---|
| Effectiveness of Control | | |
| Reliability [difficulty in obtaining consistent results in different lakes (Potential failure of treatments)] | Always removes plants | Can fail |
| Time to relief | Immediate | 7 to 14 days |
| Vegetation is collected and removed from the lake | Yes | No |
| Duration of control (and need for multiple treatments) | Shorter | Longer |
| Creation of channels | Good | Not as good |
| Control of plants over a large area | Not as good? | Good |
| Potential effect on plants outside the treated area | <u>Little to none</u> | May be significant |
| Additional Considerations | | |
| Cost | Often higher | Often lower |
| Time required to complete a treatment | Longer | Shorter |
| Percentage of cost attributable to labor | high | low |
| Capital investment | High if harvester is purchased | None [for customer] |
| Duration of work | Continues over the season | One or a few days |
| Variability in cost | high | low |
| Disposal of harvested plants | Can be difficult to find a place where plants can be delivered | Not applicable (plants decompose in lake) |
| Potential spread of an invasive aquatic plant within a lake | Should not be employed on lakes where the distribution of milfoil is limited | Can be employed on lakes where the distribution of milfoil is limited |
| Effects on non-target organisms o | r lake ecosystem | |
| Removes invertebrates, fish, frogs, snakes, turtles, etc | Yes | No |
| When target plant is an invasive, removal or destruction of native vegetation | Yes | Yes or no, depending on particular herbicide used |
| Increased fragmentation | More | Less |
| Disturbs sediment and causes suspension of sediment in the water column, which in turn may reduce water clarity | Often does, likely to a greater extent | May do so, likely to a lesser extent |
| Restrictions on use of water after treatment | No | In some cases |
| Selectivity | Limited or none | Some are, some are not |
| Minnesota Regulations (M.R. 6280) | | |
| Small area can be treated without a permit to control milfoil or other submersed aquatic plants | Yes (limited to nearshore areas) | No (<u>Always</u> requires a DNR permit) |
| Limit on the amount of area that may be treated | 50% of the littoral zone | 15% of the littoral zone |