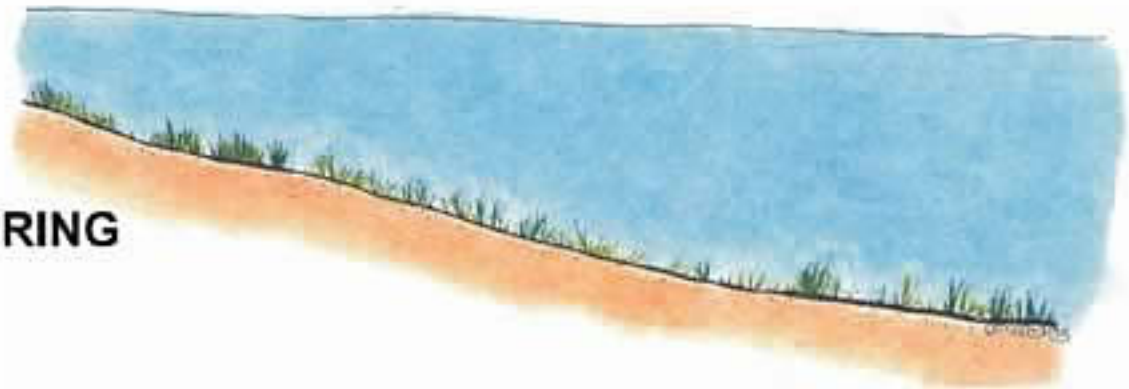
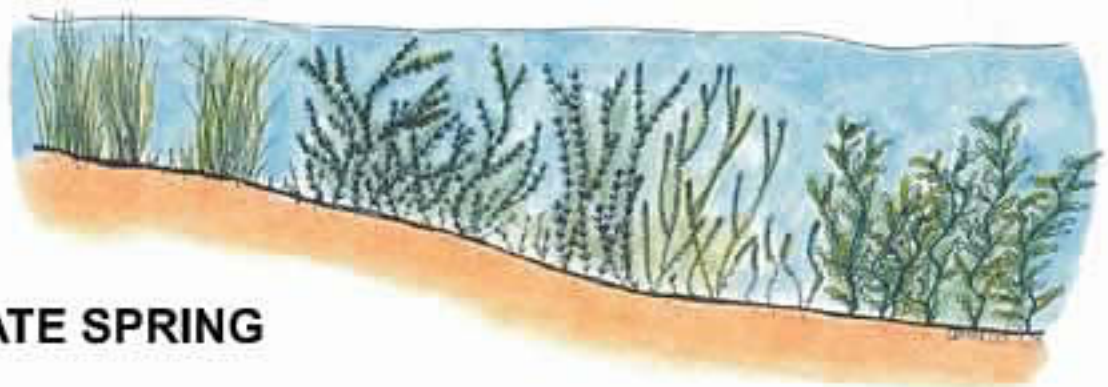
RESTORATION TECHNIQUE: Seasonal Growth of Submerged Aquatic Vegetation

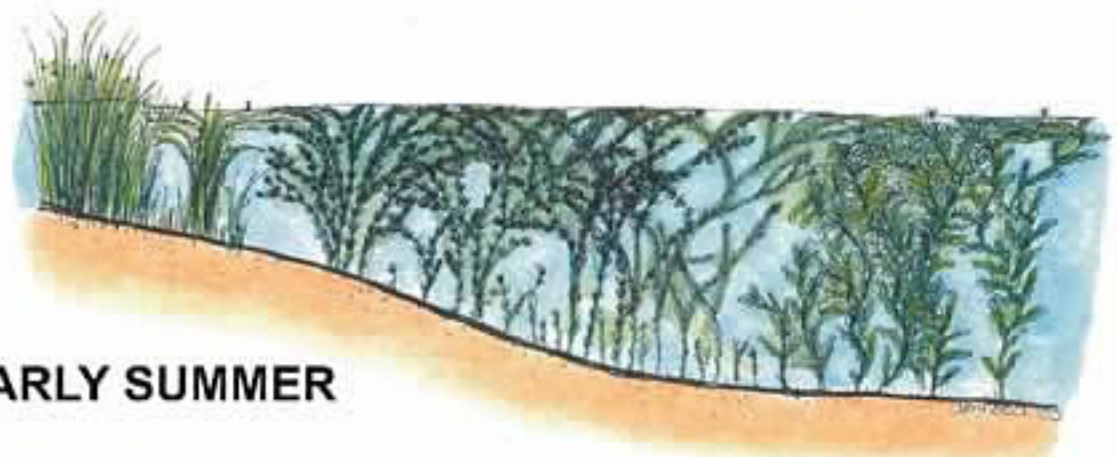
HABITAT TYPE : Sheltered Embayments



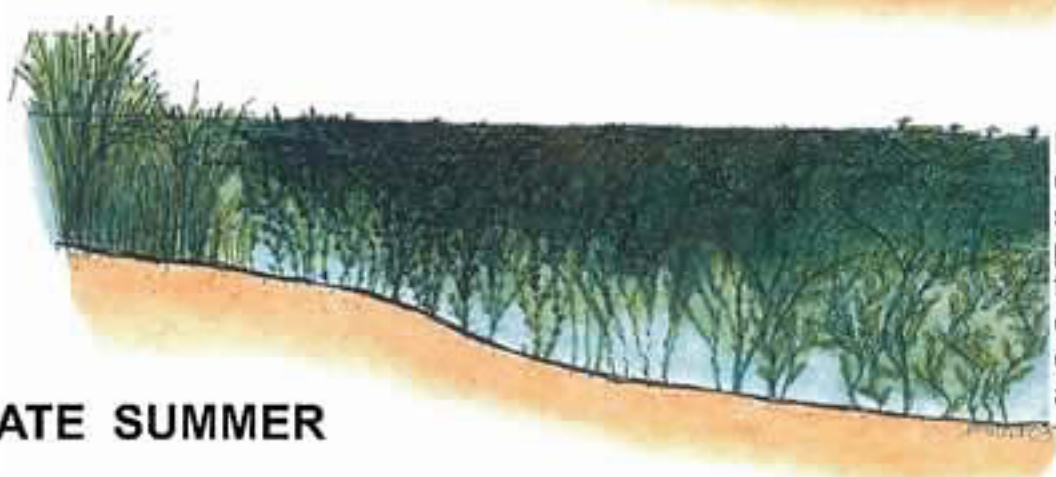
SPRING



LATE SPRING



EARLY SUMMER

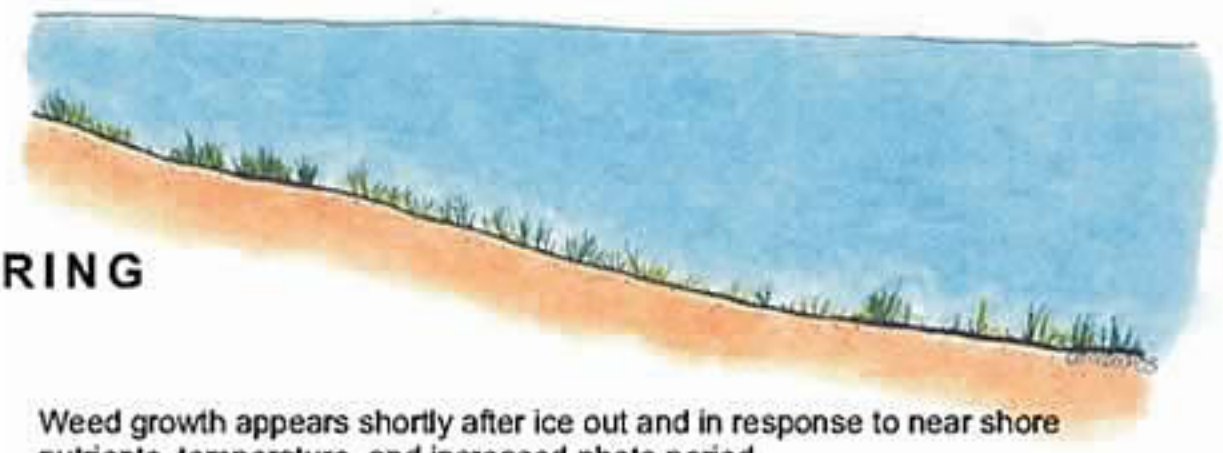


LATE SUMMER

Late season excessive growth of submerged aquatic plant can limit habitat function, locally deplete oxygen, and cause odour and aesthetics problems.

RESTORATION TECHNIQUE: Seasonal Growth of Submerged Aquatic Vegetation

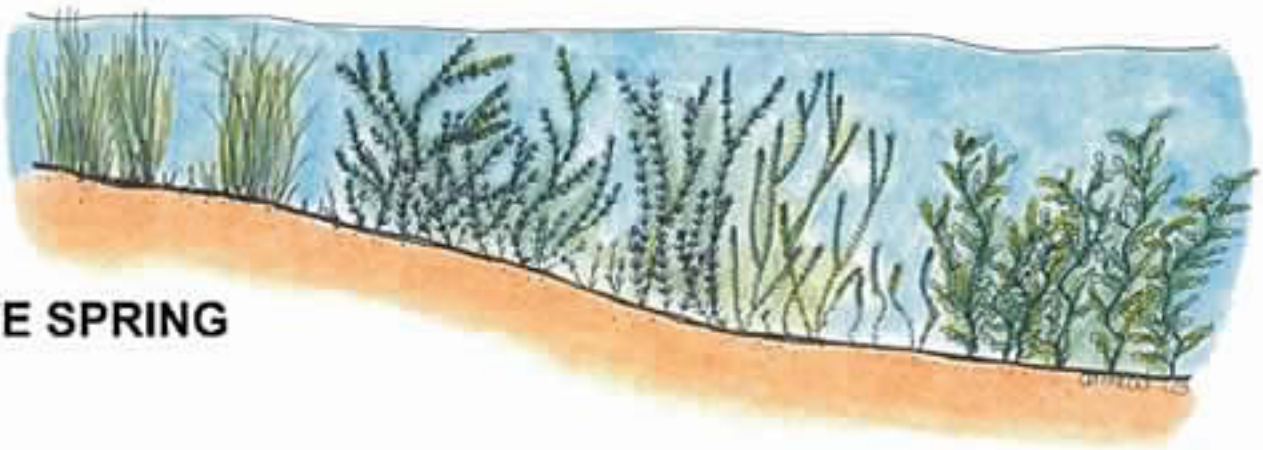
HABITAT TYPE : Sheltered Embayments



SPRING

Weed growth appears shortly after ice out and in response to near shore nutrients, temperature, and increased photo period.

Early growth is important for primary production



LATE SPRING

Submerged aquatic vegetation occupies ½ to 3/4 of the water column
Critically important as juvenile habitat, adult cover, forage and primary production.

Targets

- Improve emergent vegetation
- Improve submergent vegetation
- Increase areas of primary production
- Increase essential habitats for cool and cold water species
- Improve forage for aquatic and terrestrial species
- Add structural elements to improve near shore habitats

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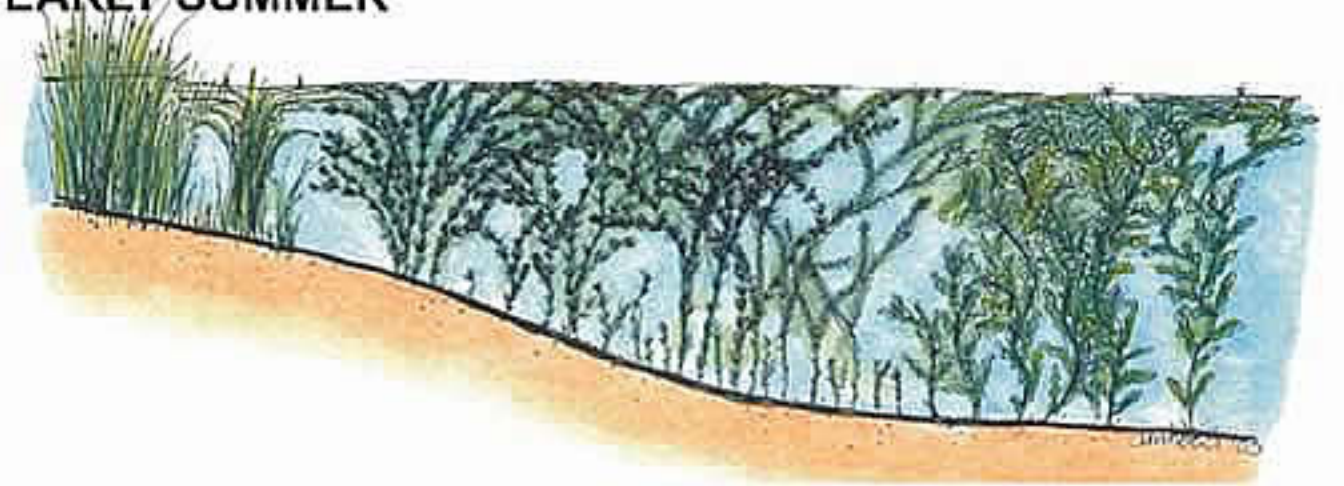
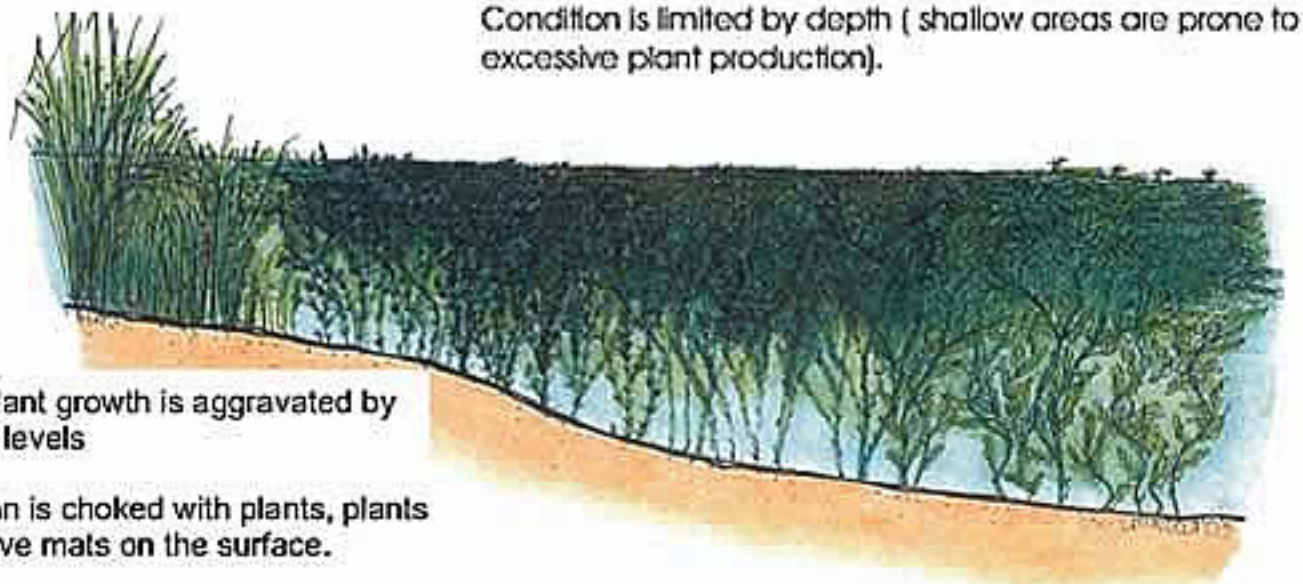
HABITAT TYPE : Sheltered Embayments

EARLY SUMMER



Submerged aquatic plants occupy the entire water column.
Optimum condition until plant density and biomass has not fully crowded areas within the aquatic system.
Optimum areas for cover, structural habitat value is at its peak.
Condition is limited by depth (shallow areas are prone to excessive plant production).

LATE SUMMER



Excessive plant growth is aggravated by falling water levels

Water column is choked with plants, plants form extensive mats on the surface.

Poor interstitial spaces provide low value from a cover perspective

Oxygen depletion is a localized problem

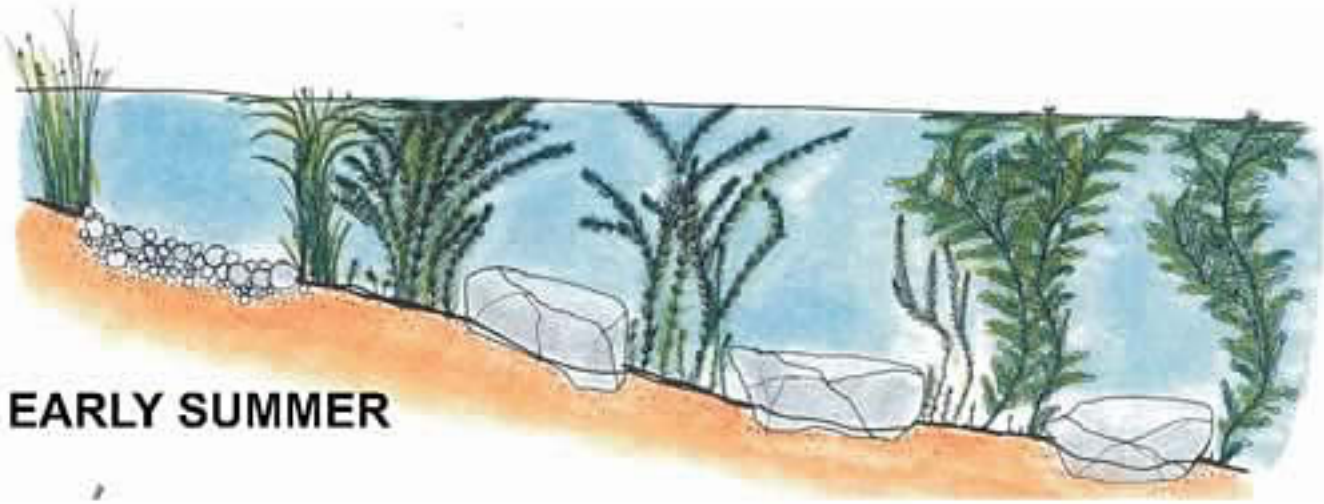
Condition is aggravated in shallow water zones

Targets

- Improve emergent vegetation
- Improve submergent vegetation
- Increase areas of primary production
- Increase essential habitats for cool and cold water species
- Improve forage for aquatic and terrestrial species
- Add structural elements to improve near shore habitats

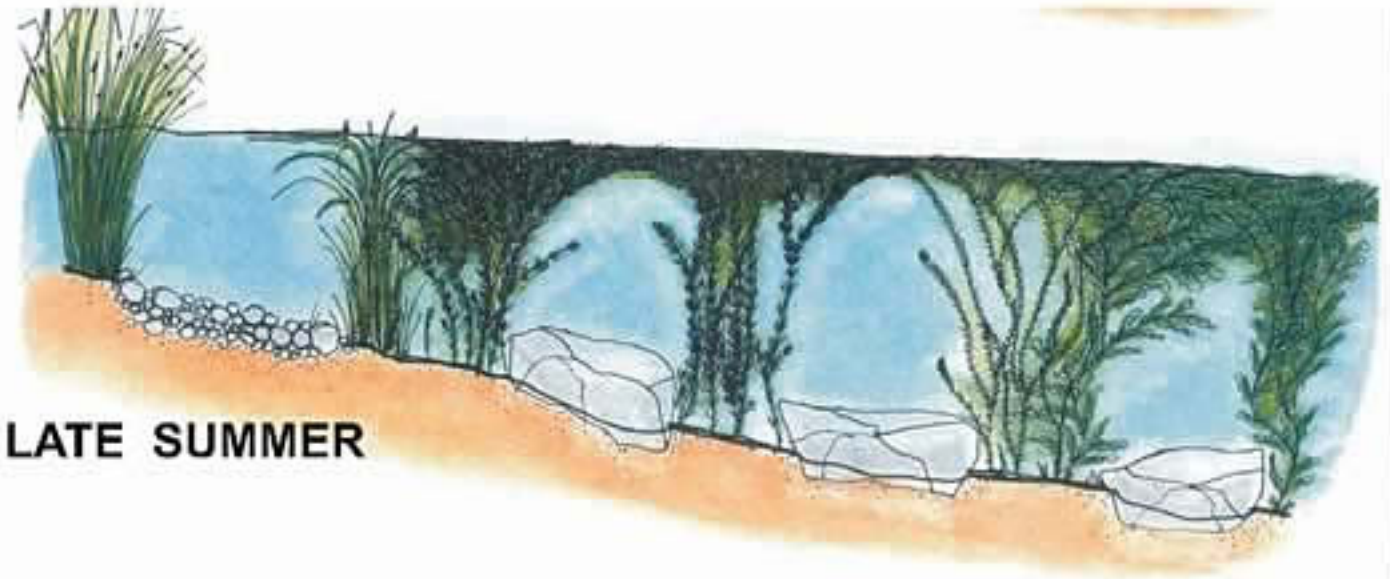
RESTORATION TECHNIQUE: Modified Growth of Submerged Aquatic Vegetation

HABITAT TYPE : Sheltered Embayments



Habitat Function and Limiting Factor

Growth of aquatic plants and the development of a edge and voids within the aquatic plants coincides with the most productive aquatic season.

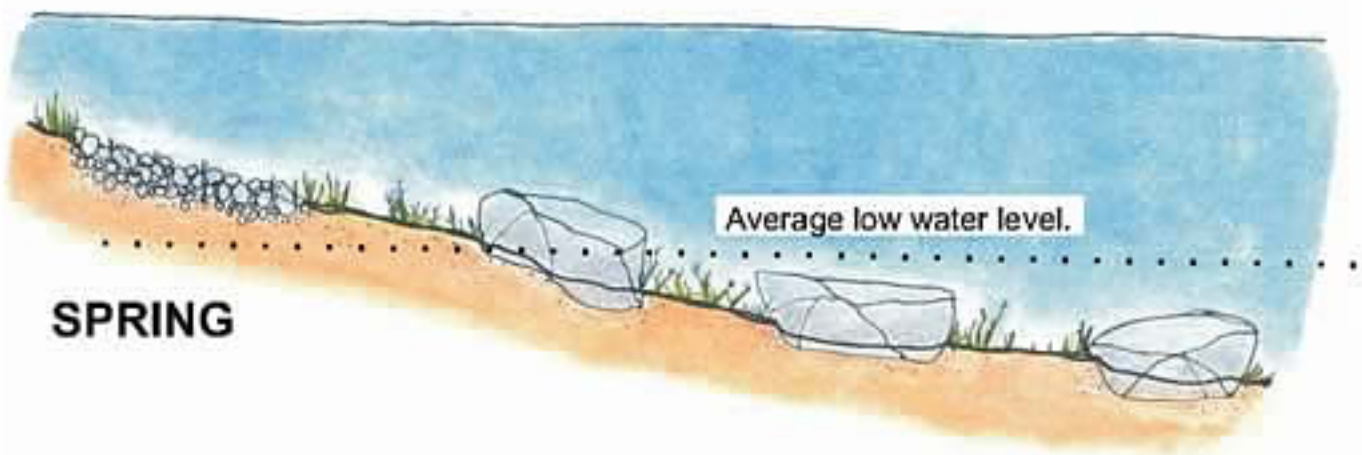


Targets

- Improve emergent vegetation
- Improve submergent vegetation
- Increase areas of primary production
- Increase essential habitats for cool and cold water species
- Improve forage for aquatic and terrestrial species
- Add structural elements to improve near shore habitats

RESTORATION TECHNIQUE: Modified Growth of Submerged Aquatic Vegetation

HABITAT TYPE : Sheltered Embayments



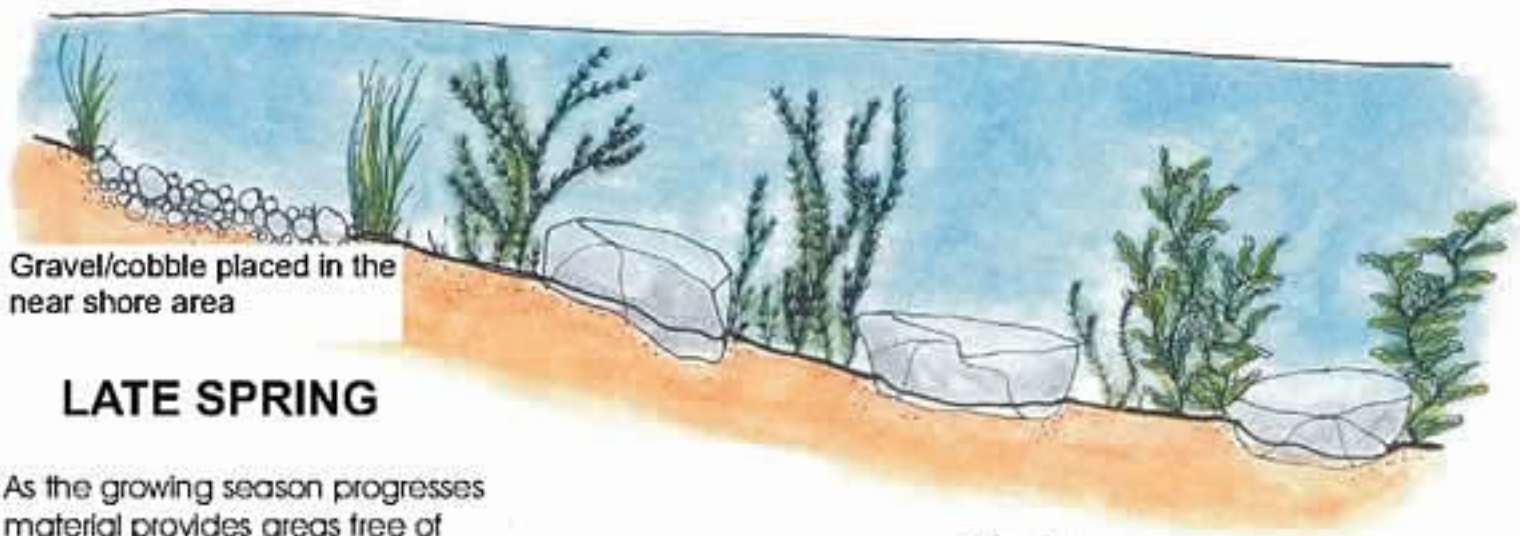
SPRING

Construction Techniques and Material
Placement of aggregates and large flat rocks limit the extent of rooted aquatic vegetation

Material could also function as early season cover or spawning substrate

Large flat stones placed from shore or from a boat provide optimum coverage without impact to navigation

Gravels could be placed in areas that are exposed in low water (typically December) to enhance self cleansing



LATE SPRING

As the growing season progresses material provides areas free of submerged plants

Also provides areas within the water column that are free of vegetation which in turn dramatically increases edge habitat

Targets

- Improve emergent vegetation
- Improve submergent vegetation
- Increase areas of primary production
- Increase essential habitats for cool and cold water species
- Improve forage for aquatic and terrestrial species
- Add structural elements to improve near shore habitats