Virginia Marine Resources Commission

Submerged Aquatic Vegetation (SAV) Guidance

Criteria Defining SAV Beds and Delineating Areas Where There is Potential for SAV Restoration

For purposes of this guidance "Submerged Aquatic Vegetation" (SAV) means any of a diverse assemblage of underwater plants found in the shoal areas of Chesapeake Bay, Virginia's coastal bays and river tributaries, primarily eelgrass (*Zostera marina*) and widgeon grass (*Ruppia maritima*), and including, but not limited to: Eurasian watermilfoil (*Myriophyllum spicatum*), redhead grass (*Potamogeton perfoliatus*), wild celery (*Vallisneria americana*), common elodea (*Elodea canadensis*), water stargrass (*Heteranthera dubia*), coontail (*Ceratophyllum demersum*), water-weed (*Egeria densa*), muskgrass (*Najas minor*), pondweeds (*Potamogeton* sp.), Hydrilla (*Hydrilla verticillata*) and naiads (*Najas* sp.).

The importance of Submerged Aquatic Vegetation (SAV) as a resource and habitat within the tidal waters of the Commonwealth is well documented. The protection and restoration of SAV has been a long standing commitment of the Commonwealth and is identified in numerous Bay Program agreements and strategies for SAV management. Furthermore, when considering proposals for use of State-owned submerged lands, including leasing of oyster planting grounds, the Commission must consider the effects of any project or activity on SAV.

SAV coverage has been mapped annually by the Virginia Institute of Marine Science (VIMS) since 1984 and potential restoration areas totaling 185,000 acres in the Chesapeake Bay (approximately 77,500 acres in Virginia) have also now been identified by the Chesapeake Bay Program partners based on historic coverage. Combined, this information has been utilized by the Commission as criteria to guide resource management decisions. Recent fluctuations in SAV coverage due to multiple factors including temperature, substrate and water depth, however, have hampered the ability to utilize the most recent year survey information as the primary criteria and basis for decisions regarding proposed projects and activities potentially affecting existing SAV beds, and the use of historic coverage for projects and activities potential impacting SAV restoration areas. This makes it necessary to consider recent multiple year coverage of SAV to define SAV beds and to identify areas for potential SAV restoration.

Criteria Defining SAV Beds:

SAV Beds shall include all those areas of SAV identified and annually mapped by VIMS during at least 1 of the previous 5 years. Such beds shall be considered a "stand of SAV".

Criteria Delineating Areas Where There is Potential for SAV Restoration:

Potential areas for SAV restoration shall include all those areas of SAV, identified and annually mapped by VIMS during at least 1 of the previous 10 years, and any area specifically set aside for SAV restoration or protection by the Commission.

Review and Coordination of projects and Leasing of Oyster Planting Grounds Involving Beds of SAV or Potential SAV Restoration Areas:

SAV beds as identified by the criteria for defining SAV beds and potential SAV restoration areas shall be mapped and included on the oyster planting ground maps prepared and maintained by the Commission. Such maps shall be updated annually following publication of the most recent year survey conducted by VIMS.

It shall be the Commission's policy to avoid authorization of any new structure, including aquaculture structures on unleased bottoms, and any new activity, or leasing oyster planting grounds on any SAV bed annually mapped by VIMS during at least 1 of the previous 5 years.

Proposed encroachments or activities in SAV beds may be authorized by permit, if deemed acceptable, however, all mitigation measures to reduce impacts to SAV must be considered and compensation of SAV losses may be required. When projects and activities, or leasing, are deemed unacceptable to Commission staff considering the impacts on SAV beds or potential SAV restoration areas, the project and activity, or lease request, may be considered by the Commission at a public hearing.

Certain aquaculture structures are authorized by Commission regulation within oyster planting ground leases provided they are not placed upon SAV beds within such leases. However, such aquaculture structures may be permitted by the Commission provided all appropriate mitigation measures to reduce impacts to SAV are included and compensation of SAV losses may be required if necessary.

When determining whether to authorize a project and activity or lease oyster planting grounds in potential SAV restoration areas the Commission Staff shall consult with VIMS regarding the potential for the project and activity, or leasing to affect SAV restoration.

Restoration of SAV Beds Around Existing and Authorized Structures:

In cases where a SAV bed becomes established through natural restoration around existing or authorized structures, including aquaculture structures, such structures shall not be required to be removed. Such structures can continue to be used and replaced, but cannot be moved or relocate to cover the SAV bed.