

What metrics or parameters do you suggest to be monitored?

For example: % cover, shoot density, species diversity, etc.

**% cover
by species**

flowering, shoot
density, canopy
height, biomass per
unit area, epiphyte
load



% cover but
with some
estimate of
stem density -
at least in
classes.

Prefer a
precautionary
approach.
When/where WQ is
not conducive to
replanting, reg
agency needs to
deny request for
SAV impacts.

Agree with
others that
performance
stds may vary
with spp.

Other water quality
parameters if not
covered by the
permit. Turbidity,
conductivity, pH,
others?

suggest adding
temperature to
transplant and
sentinel site for
comparison

**Expansion?
Bed growing
beyond the
planting area**



**Could SAV Watchers
be involved in
mitigation site
monitoring? SAV
Watchers need
funding!!!!**

Alternatively, those
responsible for
compliance
monitoring should
be certified in the
SAV watchers Tier II
program and share
their findings with
that program.

**Wave
energy**

Yes, if paid by the
permit applicant
indirectly through a
monitoring pool of
some kind.
Otherwise, applicant's
consultant should
include monitoring in
contract.

**seed source
and
germination
rates, where
applicable**

How should restoration sites be compared to reference sites?

For example: within 20% of a specific metric, using Short/Gamble success ratio, etc.

Reference sites with sufficient SAV cover may be far enough away that they don't represent what can be grown at the impact site. Spp present at the impact site might dictate reference site.

Pre-disturbance characteristics of the site would be reasonable. Long-term monitoring data could be used to describe that reference.



Agreed, reference site should be comparable to the restoration site in depth, species composition (before impact) and water quality if possible



Are there new or existing performance standards/success criteria you'd recommend? Please list them below:

For transients like *Ruppia*, perhaps flowering and seed production should be the end goal?

Persistence over one annual cycle considered the minimum requirement for functional success. Persistence for three to five years desirable. (STAC 2011)

An ILF program could be very suitable for mesohaline regions, where annual seeding could occur and be monitored with greater flexibility

2011 SAV Wkgrp to STAC- Successful restored beds persist over time (at least one annual cycle) and have as many of the attributes of natural SAV beds as possible.