

**General**

Do not round numbers when calculating the overall CRAM score (page 3, both modules)

Round worksheet final scores to the nearest whole integer in order to determine the rating (Worksheets 1 through 7 in Individual Vernal Pool Module and Worksheets 1 through 8 in Vernal Pool Systems Module).

Endemic Species – All vpi from Appendix 1 are endemic species. Use *best professional judgment* to decide if others are endemic to vernal pools in the region. Generalists are not usually endemic even regionally.

**Attribute 1: Landscape and Buffer Context**

**Submetric B: Average Buffer Width** – The eight 250 m transects should be placed evenly through the buffer from the edge of the AA with a buffer. These lines should not cross.

**Submetric C: Buffer Condition** – Replace Table 10 (page 16, both modules) with the following:

Table 10: Rating for Buffer Condition  
(enter rating on Scoring Sheet)

Rating	Alternative States
A	Buffer for AA is dominated by native vegetation, has undisturbed soils, and is apparently subject to little or no human visitation.
B	Buffer for AA is characterized by native and naturalized vegetation, has no appreciable phytomass accumulation or invasive infestations, and has mostly undisturbed soils and is apparently subject to little or low impact human visitation.
C	Buffer for AA is characterized by non-native vegetation with little or no native component, or has appreciable phytomass accumulation or invasive infestations, or has a moderate degree of soil disturbance/compaction, or there is evidence of at least moderate intensity of human visitation.
D	Buffer for AA is characterized by barren ground or otherwise compacted or disturbed soils, or there is significant cover of invasive species, or there is evidence of very intense human visitation.

**Attribute 2: Hydrology**

**Metric 1: Water Source** – Replace Table 11 (page 17 both modules) with the following:

Table 11: Rating for Water Source  
(enter rating on Scoring Sheet)

Rating	Alternative States
A	There is no indication that dry season conditions are substantially controlled by artificial water sources.
B	Freshwater sources that affect the dry season conditions of the AA are mostly natural, but also obviously include occasional or small effects of modified hydrology. Indications of such anthropogenic inputs include developed land or irrigated agricultural land that comprises less than 20% of the immediate vicinity.
C	Freshwater sources that affect the dry season conditions of the AA are primarily urban runoff, direct irrigation, pumped water or other artificial hydrology. Indications are developed land or irrigated agriculture that comprise more than 20 % of the immediate vicinity.
D	Natural, freshwater sources that affect the dry season conditions of the AA have been eliminated, or all wet season inflows have been impounded or diverted.

**Metric 3: Hydrologic Connectivity** – In Table 14 (page 19 in Vernal Pool Systems and page 2 (the second page 2) in Individual vernal pools) strike any language that refers to the boundary of the AA. This metric applies to both within and immediately adjacent to the AA.

**Attribute 3: Physical Structure**

**Metric 1: Structural Patch Richness** – Change Table 15 of the Individual Vernal Pool module is replaced with:

Rating	No. of Patch Types
A	≥ 7
B	5 – 6
C	3 – 4
D	≤ 2

**Definition: Drainage branches (more than 1 drainage branch)** – Must include obvious overland flow (swales) to be a drainage branch (page 22 in Vernal Pool Systems *ONLY*).

**Definition: Patches of dense vegetation (Juncus, Eleocharis, bunchgrasses)** – Strike the reference to “below the zone of maximum inundation”. This patch refers to both wetland and upland patches of dense vegetation. (page 23 in Vernal Pool Systems and the second page 4 in Individual Vernal Pools).

**Metric 3: Topographic Complexity** – (Metric 2 in Individual Vernal Pools and Metric 3 in Vernal Pool Systems) The pool profiles should be along the long axis of the pool and perpendicular to the long axis across the middle (not the cardinal directions).

**Metric 3: Topographic Complexity** – Table 19 (page 27 of the Vernal Pool Complexes *ONLY*) should be replaced with:

Table 19: Rating for Overall Topographic Complexity for Vernal Pool Systems  
(enter rating in Scoring Sheet)

Rating	Vernal Pool Systems
A	≥ 11
B	8 – 10
C	5 – 7
D	≤ 4

**Attribute 4: Biotic Structure**

**Metric 1: Horizontal Interspersion and Zonation** – Table 21 (page 29 of *Vernal Pool Complexes module ONLY*) should be replaced with:

Table 21: Rating for Horizontal Interspersion for Vernal Pool Systems  
(enter rating in Scoring Sheet)

Rating	Vernal Pool Systems
A	≥ 11
B	8 – 10
C	5 – 7
D	≤ 4

**Submetric C: Endemic Species Richness** – See general note above and change Table 21 (the second page 11 of the *Individual Vernal Pools module ONLY*) to the following:

Table 21: Rating for Endemic Species Richness  
(enter rating in Scoring Sheet)

Rating	Endemic Species Richness
A	$\geq 6$
B	4 – 5
C	2 – 3
D	$\leq 1$