NEVADA WEED MAPPING DATA STANDARDS

The following are the basic information necessary to inventory and monitor invasive plant populations. These data and mapping standards have been agreed to by a group of weed professionals and scientists and represent the minimum or core information necessary to characterize a weed infestation. **Note**: the options for each required element are listed in descending order of preference.

MINIMUM REQUIRED ELEMENTS:

1. Identification of Weed, using at least one of the following:
a. scientific name (Genus and species)
b. common name as listed on the current Nevada Noxious Weeds list
c. USDA plant code
d. diagnostic photograph(s)

2. Identification Confidence, expressed as a numeric code representing 25% intervals of confidence.

3. Identification Method(s), the method used to identify the plant, i.e. personal knowledge, other expert, compared with specimen / photo / drawing, keyed in reference, etc.)

4. Date(s) observed and/or surveyed, the date the weed infestation was observed in the field. It does not refer to the date information was entered into the computer.

5. Observer/Surveyor/Source Name(s), the individual who **collected** the information in the field at the site of the infestation, plus as much of the following as possible:
a. email address(s)
b. telephone number(s)
c. postal address(s)
d. organization(s)
e. citation, if from a secondary source such as literature report, museum specimen, etc., and not a primary observation

6. Reporter Name(s), if different from 5 above, the individual who **recorded** the information in the field at the site of the infestation, plus as much of the following as possible:
a. email address(s)
b. telephone number(s)
c. postal address(s)
d. organization(s)
e. citation, if from a secondary source such as literature report, museum specimen, etc., and not a primary observation

7. Ownership, expressed as an alphabetical code representing the organization or agency that has legal ownership of, or management authority over, the land.

8. Location, The location of a plant or an infestation. The preferred method is decimal degrees in the NAD83 coordinate system. However, any of the following methods may be used: legal; physical map with data, or UTMs.

9. Size, expressed as a numeric code representing an estimated range of acreage, plus a counted or estimated number of individuals (or above-ground stems) of target species.

10. Density, expressed as a numeric code representing the estimated percent cover of the weed species within the infested area.

11. Phenology, expressed as an alphabetical code representing the predominant stage of the plants within and infestation.

12. Disturbance, Past or present disturbances of any kind, expressed as an alphabetical code.

13. GPS Accuracy, record the actual accuracy of your GPS unit for each unit. This value will be shown on your GPS unit.

ADDITIONAL OPTIONAL INFORMATION:

Identification Method(s): documenting specimen collected from the site and deposited at an herbarium (preferably within Nevada). If this was done, please list all available specimen data including:

a. Collector name
b. Collector's collection number
c. Collection date
d. Herbarium where deposited (RENO, UNLV, NSMC, etc.)
e. Herbarium accession number

GPS equipment used, if any. Examples include Garmin Oregon 450t, Trimble Geoexplorer, Garmin eTrex, etc.

Survey or Mapping Completeness. Extent of infestation completely surveyed, expressed as:

a. Yes/No/Unknown, or
b. Estimated % of the total infestation that was captured in the survey

Survey Extent. Description of the complete area(s) surveyed/examined, including uninfested areas, using the same option(s) under **Location.**

Location: other detailed narrative directions and description of location. If this option is used, other helpful information includes distance and direction (air or road) from nearby landmark(s) or location(s), and elevation.

Site Description. Give a general description of the area. Description may include the dominant species, other species present, moisture, substrate/soils, topography, slope/aspect, light, water temperature/pH/clarity/etc.

Trend of Infestation. If a repeat visit to the same infestation, please record:
a. Date of previous visit
b. Extent trend (area of infestation rapidly/moderately/slightly increased/decreased, unchanged, or change unknown)
c. Density trend (density of infestation rapidly/moderately/slightly increased/decreased, unchanged, or change unknown)
Infestation History: If possible, record any knowledge of the history of the mapped infestation. Should be expressed as New, Old (with the time the infestation has been established in that location i.e. 2 yrs.) or Unknown.

Plant Condition/Vigor. Narrative of current condition of target species in the infested area, including vigor or lack thereof and any apparent causes **not** related to intentional control actions.

Biological Interactions. Any disease, predation, competition, parasitism, symbiosis, pollination, hybridization, dispersal, etc., observed to involve the target species.

Age Structure. Percent of target species senescent, mature, juveniles, first-year, seedlings (should total 100%)

Site Description. Dominant species, other species present, moisture, substrate/soils, topography, slope/aspect, light, water temperature/pH/clarity/etc. (aquatics), etc.

Site Condition. Past or present disturbances of any kind, current site use(s) if any, anticipated future disturbances or uses.

Control Actions. Description of any eradication or control actions taken during the survey, or known to have occurred in the past, including:
a. Date of action
b. Date certainty (known or estimated)
c. Action type (mechanical, herbicide, herbivory, biocontrol, fire, etc.)
d. Control agent (if known; examples: hand-pulled, mowed, plowed, Round-Up [include herbicide application rate if known], goats, weevils, etc.)
e. Current results (eradicated, % defoliated, % killed, re-sprouting, % flowering/setting seed, etc.)