



Weed-Free Gravel Program

PROGRAM OVERVIEW

MISSION: The primary goal of this program is to prevent the introduction of weed seeds into the park via imported mineral materials. Secondary goals include: creating a straight-forward method for managing weeds in gravel pits; providing assistance to gravel pit operators to develop and update their weed management plans; creating a steady source of weed-free mineral material for regional land managers; and providing incentive and recognition to gravel pit operators that implement good weed management practices.

APPROACH: While ultimately this project is a preventative measure to keep invasive plants out of the park, the program is conducted as an outreach service to gravel pits. The aim is to work collaboratively with gravel pit operators, providing the botanical skills and access to resources necessary for efficient and effective weed control. Successful participation in this program by gravel pits allows the sale of mineral material to Yosemite National Park and provides a marketable certificate that can increase the value of mineral materials. Similar programs are in place in the Lake Tahoe basin, Glacier National Park, and the greater Yellowstone area.

METHOD: This program has two primary components. First, each mineral material site will create a weed management plan following a Yosemite-provided template and developed with assistance from a park botanist. The weed management plan has a set of general conditions that are common to all sites and a set of specific conditions that are tailored to the individual site and the weeds encountered. An initial site assessment is conducted in conjunction with a Yosemite botanist to provide the information necessary to develop the specific conditions for certification.

The second component of this program consists of semi-annual inspections by a Yosemite botanist to verify that the plan is implemented and to monitor for new weed populations. These regular inspections ensure that botanists visit the sites when weed species are identifiable and eliminate the need for project by project inspections. During each site visit the weed management plan is reviewed jointly before and after inspection. Following the inspection the specific conditions for certification are expected to be updated in response to changing weed populations. A rating is assigned to the pit based on their implementation of the weed management plan. The ratings are as follows:

Passing:

Full compliance: The inspector is confident that mineral material from this site is free of listed weeds.

Conditional: The inspector cannot confidently state that all mineral material from this site is weed free. Certain restrictions are specified as to where on site mineral material may be supplied from and mitigation measures may be required.

Failing:

Unacceptable: The inspector believes that mineral material from this site poses the threat of spreading listed weeds.

Gravel pits receiving a passing rating will receive a weed-free certification valid until the next semi-annual inspection. Certified gravel pits are approved to sell mineral material to Yosemite National Park and other participating agencies. Yosemite project management regularly receives a list with the status of local gravel pits, expediting purchases and ensuring that only weed-free mineral material enters the park, even during emergency situations.

Further details are found in the following program documents:

1. Weed management plan template
2. Inspection protocols
3. List of weeds requiring control
4. List of weed control resources
5. Inspection form
6. Inspection certificate
7. Gravel pit information and inspection history form
8. Acronyms and definitions.

This program is in full compliance with the national standards for weed-free gravel as developed by the North American Weed Management Association (NAWMA). Additionally, the program conforms to the California state mandate to control all A-listed noxious weeds as defined by the California Department of Food and Agriculture (CDFA).

Participating Agencies:

Stanislaus National Forest
Sierra/San Joaquin National Forest
Sequoia National Forest
Sequoia/Kings Canyon National Park
Mother Lode Field Office of the Bureau of Land Management

Program Manager:

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WEED MANAGEMENT PLAN

Company Name

Site Name

I am requesting weed-free certification from Yosemite National Park. I understand that this certification will require two inspections a year by a Yosemite approved botanist. I agree to maintain the following required documents and furnish them upon request. I agree to adhere to the following general and specific conditions for certification. I understand that the specific conditions for certification are developed in response to current weed threats and will be revised as conditions change.

Checklist of required documents:

- This weed management plan, signed by an authorized representative.
- A current copy of the listed weeds from Yosemite National Park
- A current map of the certification site identifying weed populations
- Records of past inspections
- Records of weed treatments

Authorized representative: _____ Title: _____

Authorized representative signature: _____ Phone: _____

Designated contact employee or contracted professional: _____

Phone: _____ Date: _____

General Conditions for Certification:**Mineral Material:**

1. Mineral materials are maintained free of listed weeds¹ from the time of extraction until the time of delivery.
2. Mineral material exposed to actively flowing surface water (streams and rivers) cannot be certified as weed-free
3. Piled mineral material growing listed weeds cannot be certified as weed-free.

Weeds:

4. Tier 1 listed weeds are not allowed to set seed where likely to contaminate the extraction pit, processing facilities, storage sites, or on-site roads (collectively referred to as the “active area”). Tier 2 listed weeds are not allowed to grow on or immediately adjacent to material for sale
5. Listed weeds are promptly and aggressively controlled. Control is continual and ongoing
6. Reproductive plant parts are disposed of by on-site burning away from the active area. If burning is not feasible, reproductive plant parts must be bagged and taken to a municipal waste facility
7. Herbicide use is in strict accordance with the label and with consultation from a UC cooperative extension, county agricultural commissioner, or licensed pest control advisor

Surrounding Area:

8. The active area and periphery is regularly inspected to monitor identified weed populations
9. When listed weeds are present on adjacent property and threaten to contaminate mineral material: berms, tall vegetation, mesh fences or other mechanical barriers are established to impede the movement of seed
10. To prevent the establishment of weeds: dense native vegetation is established whenever possible to cover berms, roadsides and other open land within the active area

¹ “Listed Weeds” are defined by Yosemite National Park and documentation is provided to gravel pit operators

Specific Conditions for Certification:

An initial inspection is performed in conjunction with a Yosemite National Park botanist to establish a priority weed list and develop the following specific conditions for certification. These conditions are reviewed before and after each inspection. Updates are made as necessary to respond to current weed infestations and maintain mineral material in a weed-free state.

Listed Weed Species Encountered: _____ **Date** _____

The following treatments are required to prevent the spread of listed weeds:

Access roads: _____

Active pit area: _____

Perimeter of property: _____

Vehicle parking & wash areas: _____

Stock Piles: _____

Additional areas: _____



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INSPECTION PROTOCOLS

All inspections shall occur while weed species are present and identifiable, generally between May and September. An appropriate date and time will be set when the mineral material supplier (MMS) representative will be available and all areas of the site can be safely inspected.

Initial Assessment:

The first step in the certification process is the creation of a site specific weed management plan. An initial site assessment must be conducted in conjunction with a Yosemite botanist to inform the creation of this plan.

Yosemite (YOSE) will provide:

- a list of weeds requiring control
- a qualified, knowledgeable botanist
- a weed management plan template.

The mineral material supplier (MMS) will:

- provide a large format map of the site (11x17 or larger)
- designate a staff member or contractor to be the contact for this program
- complete a basic information form.

In conjunction YOSE and MMS will:

- identify and map listed weed species on site
- develop a list of specific conditions for certification
- discuss methods to achieve these conditions
- complete and sign a weed management plan.

Copies of the weed management plan and site weed map will be maintained by both YOSE and MMS and must be on hand during subsequent inspections.

Certification Inspection:

Once conditions identified within the weed management plan have been reached, a certification inspection will be conducted by a Yosemite botanist to verify that the plan has been implemented and to monitor for new weed populations. Continued certification will require an early season and late season inspection each year. Following each inspection the “specific conditions for certification” are expected to be updated in response to changing weed populations.

- The YOSE inspector will review the weed management plan and current weed map with the MMS representative

Certification Inspection Continued:

- The inspector will examine the entire site for listed weeds including the extraction area, processing machinery, all on-site roads, storage areas and fence lines
- All listed weed populations will be recorded on map
- The inspectors will certify that:
 - the specific and general conditions for certification in the weed management plan have been met
 - all saleable mineral material is free of listed weeds
 - no first tier listed weeds have set seed where contamination of the active area is likely.
- The findings of the inspection will be discussed with the MMS representative and a rating will be assigned to the MMS site.
- The weed management plan and site weed map will be reviewed and updated with the MMS representative to respond to current weed populations
- An official inspection form and a certificate of inspection will be completed and provided to the MMS. These documents must be maintained by both the MMS and YOSE

Mineral Material Site Ratings:

A rating will be assigned to the pit based on their implementation of the weed management plan. Gravel pits receiving a passing rating are approved to sell mineral materials to Yosemite. The ratings are as follows:

Passing:

Full compliance: The inspector is confident that mineral material from this site is free of listed weeds

Conditional: The inspector cannot confidently state that all mineral material from this site is weed free. Certain restrictions will be specified as to where on site mineral material may be supplied from and mitigation measures may be specified

Failing:

Unacceptable: The inspector believes that mineral material from this site poses the threat of spreading listed weeds



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LISTED WEEDS

The following plants are **first tier** listed weeds and require control to receive weed-free certification. These plants are not allowed to grow in the active areas of gravel pits or set seed where likely to contaminate mineral material. These plants are California Department of Food and Agriculture A-rated noxious weeds, North American Weed Management Association designated noxious weeds, or deemed a threat to Yosemite National Park.

Scientific Name	Family	Common Name
<i>Alternanthera philoxeroides</i>	Amaranthaceae	Alligatorweed
<i>Conium maculatum</i>	Apiaceae	Poison hemlock
<i>Foeniculum vulgare</i>	Apiaceae	Sweet fennel
<i>Ambrosia tomentosa</i>	Asteraceae	Skeletonleaf bursage
<i>Arctium minus</i>	Asteraceae	Common burdock
<i>Arctotheca calendula</i>	Asteraceae	Capeweed
<i>Artemisia absinthium</i>	Asteraceae	Absinth wormwood
<i>Acroptilon repens</i>	Asteraceae	Russian knapweed
<i>Carduus acanthoides</i>	Asteraceae	Plumeless thistle
<i>Carduus nutans</i>	Asteraceae	Musk thistle
<i>Carduus pycnocephalus</i>	Asteraceae	Italian thistle
<i>Carduus tenuiflorus</i>	Asteraceae	Slenderflower thistle
<i>Cathamus leucocaulos</i>	Asteraceae	Whitestem distaff thistle
<i>Centaurea calcitrapa</i>	Asteraceae	Purple starthistle
<i>Centaurea cyanus</i>	Asteraceae	Bachelor's button
<i>Centaurea diffusa</i>	Asteraceae	Diffuse knapweed
<i>Centaurea iberica</i>	Asteraceae	Iberian starthistle
<i>Centaurea maculosa</i>	Asteraceae	Spotted knapweed
<i>Centaurea melitensis</i>	Asteraceae	Tocolote
<i>Centaurea pratensis</i>	Asteraceae	Meadow knapweed
<i>Centaurea repens</i>	Asteraceae	Russian knapweed
<i>Centaurea solstitialis</i>	Asteraceae	Yellow star thistle
<i>Centaurea triumfettii</i> (virgata, squarrosa)	Asteraceae	Squarose knapweed
<i>Chondrilla juncea</i>	Asteraceae	Rush skeletonweed
<i>Cirsium arvense</i>	Asteraceae	Canada thistle
<i>Cirsium ochrocentrum</i>	Asteraceae	Yellowspine thistle
<i>Cirsium undulatum</i>	Asteraceae	Wavyleaf thistle
<i>Crupina vulgaris</i>	Asteraceae	Bearded creeper
<i>Dittrichia graveolens</i>	Asteraceae	Stinkwort
<i>Hieracium aurantiacum</i>	Asteraceae	Orange hawkweed
<i>Hieracium pratense</i>	Asteraceae	Yellow hawkweed
<i>Helianthus ciliaris</i>	Asteraceae	Blueweed
<i>Leucanthemum vulgare</i>	Asteraceae	Oxeye daisy
<i>Onopordum acanthium</i>	Asteraceae	Scotch thistle
<i>Onopordum illyricum</i>	Asteraceae	Illyrian thistle
<i>Onopordum tauricum</i>	Asteraceae	Taurian thistle

<i>Scolymus hispanicus</i>	Asteraceae	Golden thistle
<i>Senecio jacobaea</i>	Asteraceae	Tansy ragwort
<i>Silybum marianum</i>	Asteraceae	Blessed milkthistle
<i>Tagetes minuta</i>	Asteraceae	Wild marigold
<i>Tanacetum vulgare</i>	Asteraceae	Common tansy
<i>Tripleurospermum perforatum</i>	Asteraceae	Scentless chamomile
<i>Cynoglossum officinale</i>	Boraginaceae	Houndstongue
<i>Cardaria chalapensis</i>	Brassicaceae	Lens-podded hoarycress
<i>Cardaria draba</i>	Brassicaceae	Heart-podded hoarycress
<i>Cardaria pubescens</i>	Brassicaceae	Globe-podded hoarycress
<i>Hirschfeldia incana</i>	Brassicaceae	Shortpod mustard
<i>Isatis tinctoria</i>	Brassicaceae	Dyer's woad
<i>Lepidium latifolium</i>	Brassicaceae	Perennial pepperweed
<i>Saponaria officinalis</i>	Brassicaceae	Bouncingbet
<i>Cannabis sativa</i>	Cannabaceae	Hemp
<i>Halogeton glomeratus</i>	Chenopodiaceae	Saltlover
<i>Salsola vermiculata</i>	Chenopodiaceae	Wormleaf saltwort
<i>Convolvulus arvensis</i>	Convolvulaceae	Field bindweed
<i>Cucumis myriocarpus</i>	Cucurbitaceae	Dudaim melon
<i>Cuscuta japonica</i>	Cuscutaceae	Japanese dodder
<i>Cuscuta reflexa</i>	Cuscutaceae	Giant dodder
<i>Dipsacus fullonum</i>	Dipsacaceae	Common teasel
<i>Dipsacus sativus</i>	Dipsacaceae	Indian teasel
<i>Elaeagnus angustifolia</i>	Elaeagnaceae	Russian olive
<i>Euphorbia dentate</i>	Euphorbiaceae	Toothed spurge
<i>Euphorbia esula</i>	Euphorbiaceae	Leafy spurge
<i>Euphorbia oblongata</i>	Euphorbiaceae	Oblong spurge
<i>Euphorbia serrata</i>	Euphorbiaceae	Serrate spurge
<i>Sesbania punicea</i>	Euphorbiaceae	Rattlebox
<i>Alhagi maurorum</i>	Fabaceae	Camelthorn
<i>Cytisus scoparius</i>	Fabaceae	Scotchbroom
<i>Genista monspessulana</i>	Fabaceae	French broom
<i>Halimodendron halodendron</i>	Fabaceae	Russian salt tree
<i>Lathyrus latifolius</i>	Fabaceae	Perennial sweet pea
<i>Lespedeza cuneata</i>	Fabaceae	Sericea lespedeza
<i>Prosopis strombulifera</i>	Fabaceae	Creeping mequite
<i>Robinia pseudoacacia</i>	Fabaceae	Black locust
<i>Spartium junceum</i>	Fabaceae	Spanish broom
<i>Sphaerophysa salsula</i>	Fabaceae	Austrian peaweed
<i>Vicia benghalensis</i>	Fabaceae	Purple vetch
<i>Vicia villosa</i>	Fabaceae	Winter vetch
<i>Hydrilla verticillata</i>	Hydrocharitaceae	Hydrilla
<i>Hydrocharis morsus-ranae</i>	Hydrocharitaceae	Frogbit
<i>Hypericum perforatum</i>	Hypericaceae	Klamath weed
<i>Salvia aethiopsis</i>	Lamiaceae	African sage
<i>Salvia virgata</i>	Lamiaceae	Southern meadow sage
<i>Lythrum salicaria</i>	Lythraceae	Purple loosestrife
<i>Orobanche cooperi</i>	Orobanceae	Cooper's broomrape
<i>Orobanche ramosa</i>	Orobanceae	Branched broomrape

<i>Achnatherum brachychaetum</i>	Poaceae	Punagrass
<i>Aegilops cylindrica</i>	Poaceae	Jointed goatgrass
<i>Aegilops triuncialis</i>	Poaceae	Barbed goatgrass
<i>Agropyron repens</i>	Poaceae	Quackgrass
<i>Anthoxanthum odoratum</i>	Poaceae	Sweet vernalgrass
<i>Arundo donax</i>	Poaceae	Giant reed
<i>Bromus inermis</i> ssp. <i>inermis</i>	Poaceae	Smooth brome
<i>Bromus tectorum</i>	Poaceae	Cheatgrass
<i>Cortaderia selloana</i>	Poaceae	Pampas grass
<i>Cynodon dactylon</i>	Poaceae	Bermuda grass
<i>Dactylis glomerata</i>	Poaceae	Orchard grass
<i>Ehrharta erecta</i>	Poaceae	Panic veldtgrass
<i>Festuca arundinacea</i>	Poaceae	Tall fescue
<i>Heteropogon contortus</i>	Poaceae	Tanglehead
<i>Holcus lanatus</i>	Poaceae	Common velvet grass
<i>Milium vernal</i>	Poaceae	Milium
<i>Nardus stricta</i>	Poaceae	Matgrass
<i>Panicum miliaceum</i>	Poaceae	Wild proso millet
<i>Pennisetum clandestinum</i>	Poaceae	Kikuyu grass
<i>Phalaris arundinacea</i>	Poaceae	Reed canary grass
<i>Sorghum alnum</i>	Poaceae	Perennial sorghum
<i>Sorghum halepense</i>	Poaceae	Johnson grass
<i>Taeniatherum caput-medusae</i>	Poaceae	Medusa-head
<i>Acaena novae-zealandiae</i>	Rosaceae	Biddy biddy
<i>Potentilla recta</i>	Rosaceae	Sulfur cinquefoil
<i>Rubus discolor</i>	Rosaceae	Himalayan blackberry
<i>Rubus laciniatus</i>	Rosaceae	Cutleaf blackberry
<i>Digitalis purpurea</i>	Scrophulariaceae	Foxglove
<i>Linaria dalmatica</i>	Scrophulariaceae	Dalmatian toadflax
<i>Linaria vulgaris</i>	Scrophulariaceae	Yellow toadflax
<i>Striga asiatica</i>	Scrophulariaceae	Witchweed
<i>Verbascum blattaria</i>	Scrophulariaceae	Moth mullein
<i>Verbascum thapsus</i>	Scrophulariaceae	Common mullein
<i>Ailanthus altissima</i>	Simaroubaceae	Tree of heaven
<i>Hyoscyamus niger</i>	Solanaceae	Black henbane
<i>Physalis longifolia</i>	Solanaceae	Long-leaf groundcherry
<i>Solanum cardiophyllum</i>	Solanaceae	Heartleaf nightshade
<i>Solanum carolinense</i>	Solanaceae	Horsenettle
<i>Solanum dimidiatum</i>	Solanaceae	Torrey's nightshade
<i>Solanum elaeagnifolium</i>	Solanaceae	Silverleaf nightshade
<i>Solanum rostratum</i>	Solanaceae	Buffalobur
<i>Tamarix parviflora</i>	Tamaricaceae	Tamarisk
<i>Tamarix ramosissima</i>	Tamaricaceae	Tamarisk
<i>Peganum harmala</i>	Zygophyllaceae	Harmel
<i>Tribulus terrestris</i>	Zygophyllaceae	Puncture vine
<i>Zygophyllum fabago</i>	Zygophyllaceae	Syrian beancaper

The following plants are **second tier** listed weeds and are not allowed to grow on material for sale. While presence on the site is permissible control on and around stock piled material is required. These plants are California Department of Food and Agriculture A-rated noxious weeds, North American Weed Management Association designated noxious weeds, or deemed a threat to Yosemite National Park.

Scientific Name	Family	Common Name
Vinca major	Apocynaceae	Greater periwinkle
Hedera helix	Araliaceae	English ivy
Sonchus arvensis	Asteraceae	Perennial sowthistle
Brassica nigra	Brassicaceae	Black mustard
Brassica rapa	Brassicaceae	Field mustard
Sisymbrium irio	Brassicaceae	London rocket
Melilotus alba	Fabaceae	White sweetclover
Melilotus indica	Fabaceae	Sourclover
Melilotus officinalis	Fabaceae	Yellow sweetclover
Geranium dissectum	Geraniaceae	Cutleaf geranium
Geranium robertianum	Geraniaceae	Robert geranium
Avena fatua	Poaceae	Wild oats
Brachypodium sylvaticum	Poaceae	Slender false brome
Bromus diandrus	Poaceae	Ripgut brome
Bromus madritensis ssp. rubens	Poaceae	Foxtail chess
Nicotiana glauca	Solanaceae	Tree tobacco



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WEED CONTROL RESOURCES

County Agricultural Commissioner:

A public service to provide weed identification, advice on methods to control weeds and pesticide applicator permits

Alameda County: Dennis Bray (510) 670-5232 <http://www.acgov.org/cda/awm/>
Amador County: Michael Boitano (209) 223-6487 <http://www.co.amador.ca.us/index.aspx?page=160>
Butte County: Richard Price (530) 538-7381 <http://www.buttecounty.net/Agricultural%20Commissioner.aspx>
Calaveras County: Mary Mutz (209) 754-6504 <http://www.co.calaveras.ca.us/departments/agriculture.asp>
Contra Costa County: Vincent Guise 925.646.5250 <http://www.co.contra-costa.ca.us/index.aspx?nid=1542>
El Dorado County: William J. Stephans (530) 621-5520 <http://www.co.el-dorado.ca.us/ag/>
Fresno County: Carol Hafner (559) 456-7510 <http://www.co.fresno.ca.us/Departments.aspx?id=114>
Inyo and Mono Counties: George L. Milovich (760) 873-7860 <http://www.inyomonoagriculture.com/index.html>
Madera County: Robert Rolan 559-675-7703 <http://www.madera-county.com/agcommissioner/>
Mariposa County: Cathi Boze (209) 966-2075 <http://www.mariposacounty.org/index.aspx?nid=63>
Merced County: (209) 385-7431 <http://www.co.merced.ca.us/index.aspx?nid=58>
Placer County: Christine Turner 530-889-7372 <http://www.placer.ca.gov/Departments/Agriculture.aspx>
Sacramento County: Frank Carl (916) 875-6603 <http://www.agcomm.saccounty.net/default.htm>
San Joaquin County: Scott Hudson (209) 953-6000 <http://www.co.san-joaquin.ca.us/agcomm/>
Stanislaus County: (209) 525-4730 <http://www.stanag.org/>
Tulare County: Gary Kunkel (559) 684-3350 <http://agcomm.co.tulare.ca.us/>
Tuolumne County: 209-533-569 http://portal.co.tuolumne.ca.us/ps/ps/TUP_AG_AIR_POLL_WTS/ENTP/h/
Yolo County: Rick Landon (530) 666-8140 <http://www.yolocounty.org/index.aspx?page=504>

UC Cooperative Extension:

County offices can provide advice on weed control methods, literature on specific species and other expertise:

Amador County (209) 223-6482 <http://ceamador.ucdavis.edu>
Butte County (530) 538-7201 <http://cebutte.ucdavis.edu>
Calaveras County (209) 754-6477 <http://cecalaveras.ucdavis.edu>
El Dorado County (530) 621-5502 <http://ceeldorado.ucdavis.edu>
Fresno County (559) 456-7285 <http://cefresno.ucdavis.edu>
Inyo-Mono Counties (760) 873-7854 <http://ceinyo-mono.ucdavis.edu>
Madera County Neil MacDougald (559) 675-7879 <http://cemadera.ucdavis.edu>
Mariposa County (209) 966-2417 <http://cemariposa.ucdavis.edu>
Merced County (209) 385-7403 <http://cemerced.ucdavis.edu>
Placer-Nevada Counties (530) 889-7385 <http://ceplacer.ucdavis.edu>
Sacramento County (916) 875-6913 <http://cesacramento.ucdavis.edu>
San Joaquin County (209) 953-6100 <http://cesanjoaquin.ucdavis.edu>
Stanislaus County (209) 525-6800 <http://cestanislaus.ucdavis.edu>
Tulare County Steve Wright (559) 684-3300 <http://cetulare.ucdavis.edu>
Tuolumne County (209) 533-5695 <http://cetuolumne.ucdavis.edu>
Yolo County (530) 666-8143 <http://ceyolo.ucdavis.edu>

Web-based Resources:**California Department of Food and Agriculture:**

Excellent page containing photographs of CDFA listed weeds with information pages including descriptions and treatment methods (note: use the alphabetical list in the side bar)

http://www.cdfa.ca.gov/phpps/ipc/weedinfo/winfo_photogal-frameset.htm

Cal-IPC:

Excellent description of many California weeds including detailed descriptions of various control methods

<http://www.cal-ipc.org/ip/management/ipcw/sciname.php>

Center for Invasive Plant Management:

Website with an enormous amount of weed information. This page has a list of sites with weed photo galleries

http://www.weedcenter.org/inv_plant_info/images.html

Invasipedia:

Wikipedia based resource with in-depth description of various herbicide treatments as well as natural history and other control methods listed by weed.

<http://wiki.bugwood.org/Invasipedia>

North American Weed Management Association:

The organization developing national standards for weed work. The site is a powerful portal to many other organizations, companies, universities and government offices related to weeds. Also contains many information sites and educational opportunities

<http://www.nawma.org/Ed.html>

The Nature Conservancy:

Weed Control Methods Handbook: An in-depth discussion of several commonly used herbicides as well as a description of various control methods generalized for all weeds

<http://www.invasive.org/gist/handbook.html>

Image Archive: A very large collection of photos of invasive plants (note: listed by scientific name. Link is for plants A-C, follow links on page to D-Z weeds)

<http://www.invasive.org/gist/photosa-c.html>

UC Davis:

Website that gives control options for many weed species:

http://ucce.ucdavis.edu/specialsites/weed_sept/

Weed photo gallery:

http://www.ipm.ucdavis.edu/PMG/weeds_intro.html



Weed-Free Gravel Program

INSPECTION FORM

Operator: _____	Date: _____
Site Name: _____	
Designated Weed Manager: _____	
Address: _____	
Phone: _____	Inspector Name: _____

Inspection Findings				
Weed Species	Location on Site	Approx. Area	Distance from Material	Mapped?

Inspection Summary			
Free of listed weeds:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	<div style="border: 1px solid black; padding: 5px;"> First Tier Weeds Observed: _____ _____ _____ _____ _____ </div>
Specific requirements for certification met:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Revision of plan required:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Mitigation required:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Resurvey required:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Final Supplier Rating: Full Compliance <input type="checkbox"/> Conditional <input type="checkbox"/> Unacceptable <input type="checkbox"/>			
Explanation: _____ _____ _____ _____ _____			

Inspection Findings (continued)				
Weed Species	Location on Site	Approx. Area	Distance from Material	Mapped?

Mitigation Required: _____

Additional Remarks: _____



Weed-Free Gravel Program CERTIFICATION OF INSPECTION

This certifies that the mineral material supplier described herein, has been inspected according to the certification standards of Yosemite National Park. The objective of the program is to help prevent and slow the spread of weeds by providing mineral material that is free of the potential for transport and dispersal of listed weed species.

Operator: _____ Phone No.: _____ - _____ - _____

Address: _____ City: _____ State: _____ ZIP: _____

Site Location: _____

Material Type: Sand Gravel Rock Top soil Other: _____

Level of Certification

A. _____ **Full compliance:** The inspector is confident that mineral material from this site is free of listed weeds

B. _____ **Conditional:** The inspector cannot confidently state that all mineral material from this site is weed-free.
Certain restrictions will be specified as to where on site mineral material may be supplied from

Restrictions: _____

C. _____ **Unacceptable:** The inspector believes that the mineral material poses the threat of spreading listed weeds

Explanation: _____

Additional Comments: _____

REQUIREMENTS

Mineral Materials shall be maintained free of listed weeds from the time of extraction until the time of delivery. Listed weeds shall not be allowed to set seed where likely to contaminate the extraction pit, processing facilities, storage sites, or on-site roads.

Certification shall be based on a reasonable and prudent visual inspection.

This facility was inspected on: Date: _____/_____/_____

This certification is issued on: Date: _____/_____/_____

This certification terminates on: Date: _____/_____/_____

Certified by: _____ Affiliation: _____



Weed-Free Gravel Program INFORMATION AND INSPECTION HISTORY

Site Name _____	CA permit # _____
Operator _____	Phone _____
Designated Weed Manager _____	Phone _____
Email _____	Fax _____
Address _____	
City _____	State _____ County _____ Zip _____
UTM Coordinates _____	
Material Type: <input type="checkbox"/> Sand <input type="checkbox"/> Gravel <input type="checkbox"/> Rock <input type="checkbox"/> Top Soil <input type="checkbox"/> Other: _____	

Directions to Site: _____

INSPECTION HISTORY					
DATE	INSPECTOR	RATING	Plan revised?	Resurvey required?	Mitigation required?



Weed-Free Gravel Program

ACRONYMS AND DEFINITIONS

Active area – Anywhere within a gravel pit where mineral materials are processed or stored including: extraction pits, crushing and sifting facilities, storage piles and on-site roads.

CDFA – California Department of Food and Agriculture

Conditional – A *passing* gravel pit inspection rating signifying that the inspector cannot confidently state that all mineral material from this site is weed free. Certain restrictions are specified as to where on site mineral material may be supplied from and mitigation measures may be required

First tier listed weed – Highest priority weeds that require control anywhere in the active area. Plants are not allowed to set seed where contamination of the active area is likely

Full compliance – A *passing* gravel pit inspection rating signifying that the inspector is confident that mineral material from this site is free of listed weeds.

General conditions for certification – Actions or measures required of all mineral material suppliers regardless of weed populations

Listed weeds – Plants deemed an invasive threat by Yosemite National Park. List is provided to all participants in the program

Mitigation – Immediate actions required to address on-site weed populations.

MMS – Mineral Material Supplier

NAWMA – North American Weed Management Association

Second tier listed weed – Common weeds that are not allowed to grow in material for sale. Control is required in and around stock piled material

Specific conditions for certification – Actions or measures required to mitigate specific weed populations encountered on site. These are developed in consultation with a Yosemite botanist and are amended in response to changing weed populations

Unacceptable – A *failing* gravel pit inspection rating signifying that the inspector believes that mineral material from this site poses the threat of spreading listed weeds

YOSE – Yosemite National Park